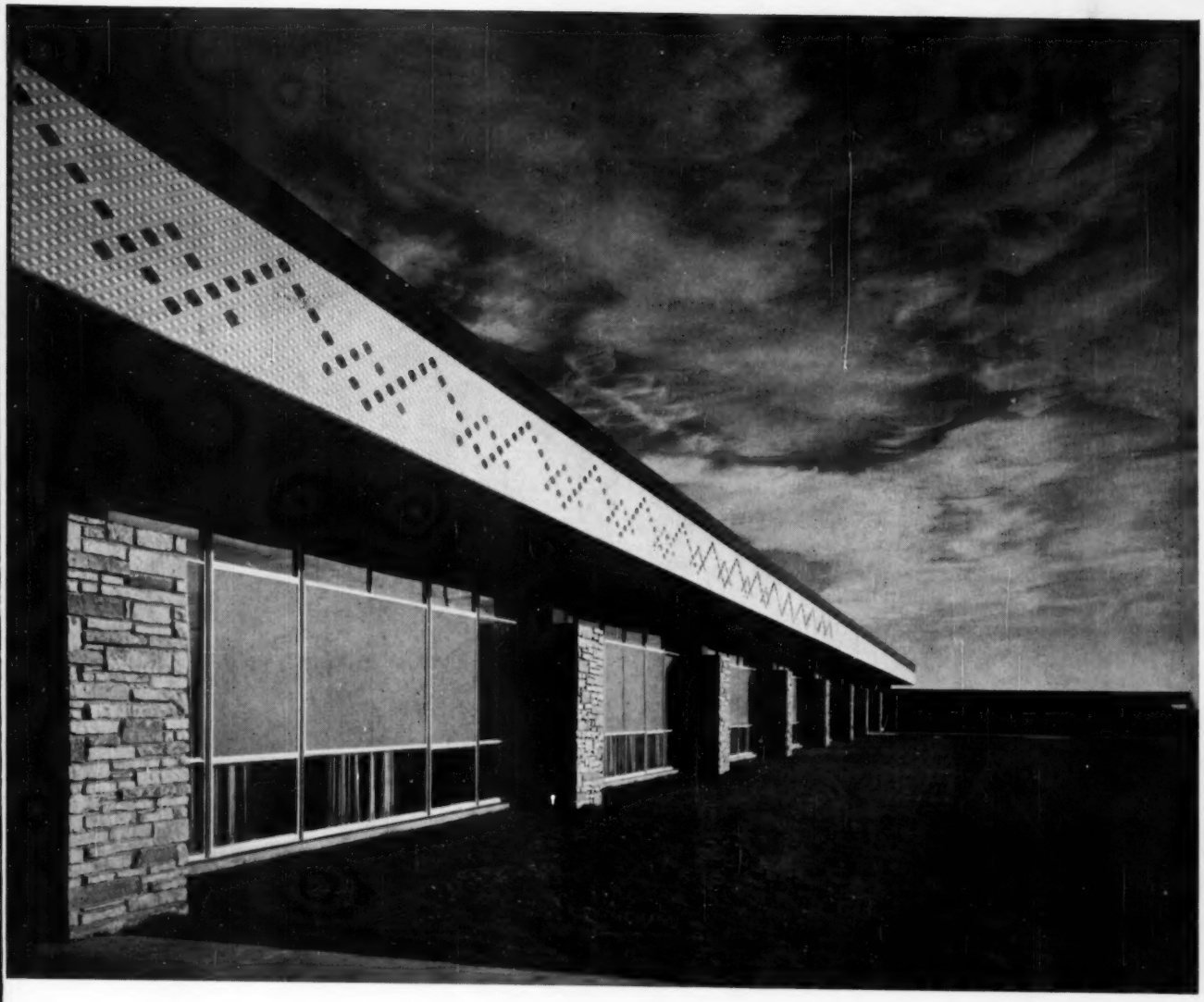

The American School Board Journal

A Periodical of School Administration

May *1961*

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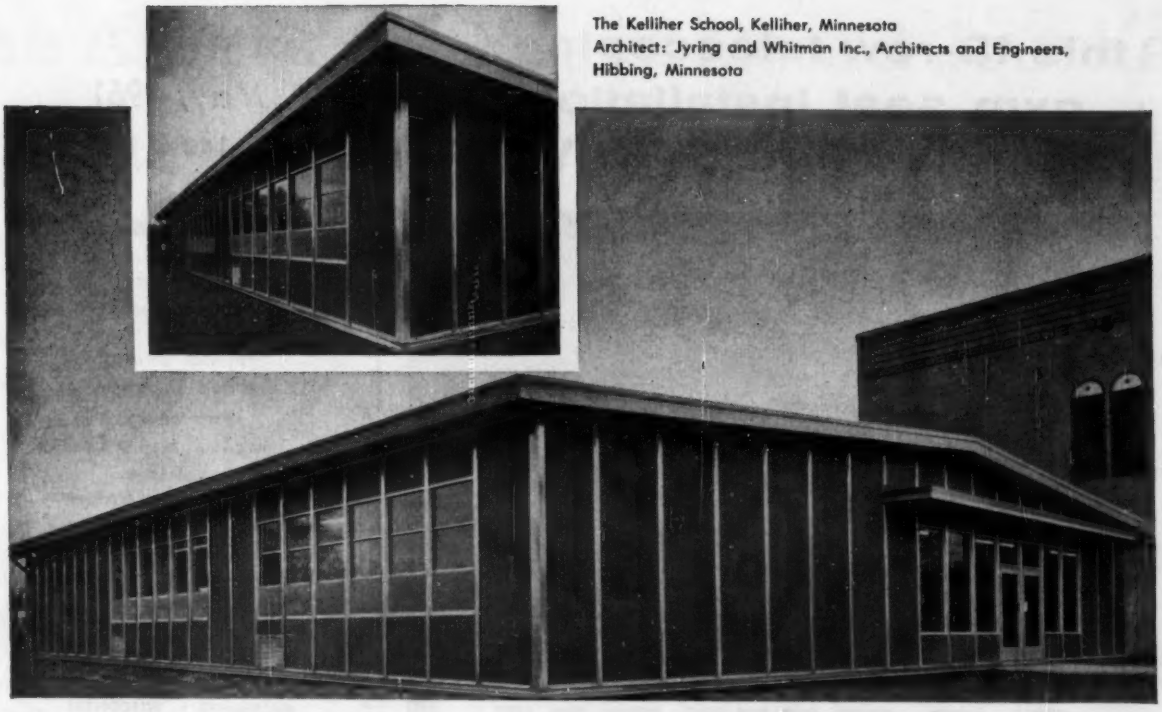

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May, 1961

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ABC

The American School Board Journal

the school scene

■ **The Investment Bankers' Association of America has registered its opposition to the $2,298,000,000 program of federal aid for elementary and secondary schools** in a statement filed by the association with the senate committee on banking and currency. The association in supporting its statement cites three facts: (1) over 279,700 new classrooms have been completed during the past four years, and an additional 69,600 classrooms are scheduled for completion; (2) the rate of growth in the enrollment is expected to decrease over 35 per cent in the next five-year period of 1961–66; (3) sales of school bonds for school construction continue at a high level, and will aggregate over $305,000,000 in January, 1961.

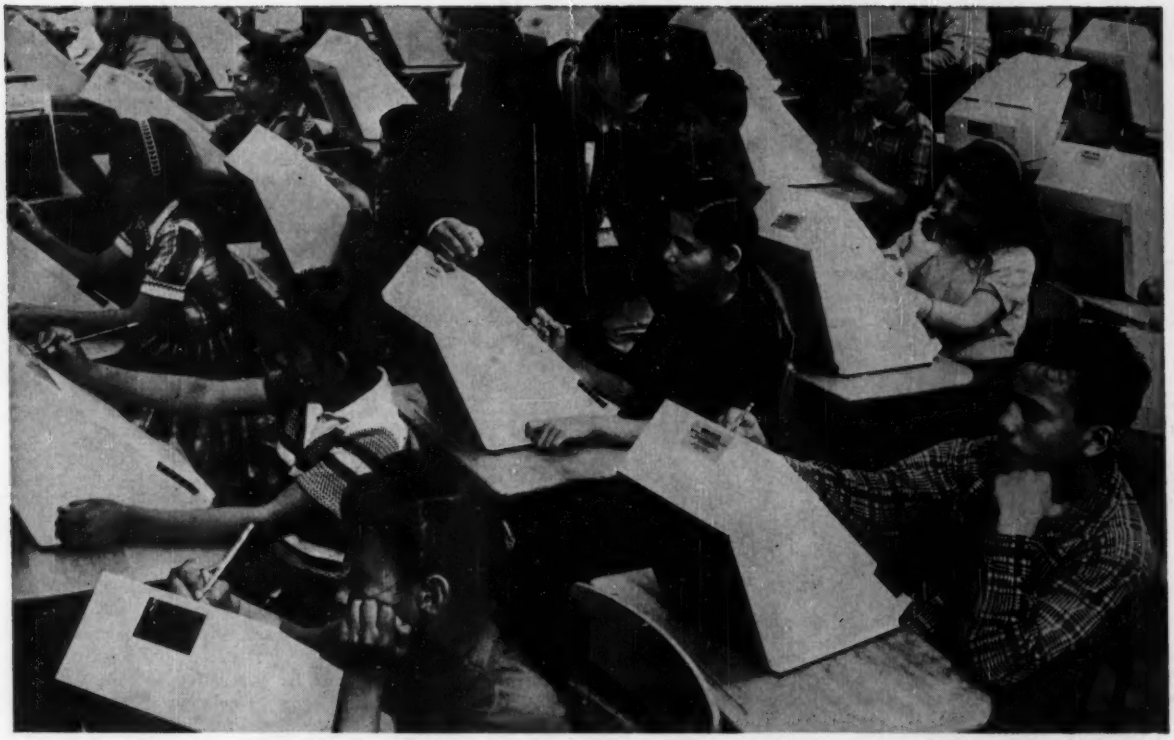
■ **Long-range changes in the school system** to alter the present pattern of school organization have been proposed by Supt. John J. Theobald in New York, N. Y. Dr. Theobald has appointed a committee of five school officials to evaluate a new way of splitting up the twelve years of schooling. The present system is organized on the six-three-three system. The new system would provide four years of intermediate school, four years of high school, and four years of elementary school, including kindergarten.

■ **More than $21 million, half of it in federal funds, has been made available for the teaching of modern foreign languages in elementary and secondary schools** since the passage of the National Defense Education Act two years ago, according to the U. S. Office of Education. The states have approved 9884 projects under provisions of the act. These include remodeling of 784 classrooms for language instruction. Electronic language laboratories, classrooms equipped with semi-isolation booths and recording equipment with playback and teacher-pupil facilities, now number more than 2500. About 20 per cent of all public high school students were enrolled in these classes during the year 1959–60, a year after the passage of the act.

■ **American high schools must accept the responsibility for furnishing guidance and counseling up to the age of 21** to the hundreds of boys and girls who end their formal education with high school graduation, or even before. Mr. John W. Gardner, president of Carnegie Corporation of New York, in an essay in the foundation's annual report for 1960, made a plea for attention to the needs of the neglected children in the lower ranges of academic talent, pointing out that "the average high school really doesn't know what to do with such boys and girls. Every high school in the land, he said, should provide continuing vocational and educational counseling for all who terminate their education short of college. They should acquaint young people with opportunities to continue their education, or to resume it after a year or two of work, as well as job opportunities.

■ **Dr. James F. Redmond, superintendent of schools at New Orleans, La., has accepted a position** as eastern director of school administration services in the management consulting firm of Booz, Allen & Hamilton. Beginning July 1, he will be located in the firm's New York office. It is hoped that the addition of Dr. Redmond to the firm's school division will enable many school systems to benefit from his broad range of professional abilities and experience.

■ During the month of February, 1961, **school bond sales amounted to the staggering sum of $311,382,800.** The largest sales were in California, $151,965,000; Illinois, $11,834,000; Michigan, $10,900,000; New York, $16,974,000; Ohio, $28,936,000; Pennsylvania, $28,451,000.



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Our next step is clearly one in which TMI-GROLIER must explore, together with the educators in the nation's schools, the best possible means for *utilizing* the courses and machines we now have, and others which are in preparation.

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Membership List Grows

Harold V. Webb
Acting Executive Director,
National School Boards Assn.

The list of NSBA members has increased by one third since September 1, 1960. Percentagewise in contrast to enrollments last year, the states leading the membership roster include Florida, Kansas, Massachusetts, Mississippi, Missouri, Montana, New Jersey, Ohio, Pennsylvania, Virginia, and West Virginia.

Colorado has more members per individual school board than any other state; in many instances, each member of a local board holds a NSBA membership. Illinois, however, has the greatest number of boards enrolled as members.

For the first time, architects, interested in school building and planning, may obtain information and service memberships in NSBA.

Memberships fall into four categories — active, information services, associate, and sustaining. The nucleus of the list includes state association officers, the NSBA Board of Directors, state boards of education, local boards, and individual members of boards of education. The sustaining membership is open to business firms who are concerned with the education field. Such memberships must be approved by the association's board of directors.

New Manual Help Boards Write Policies

More than 850 school districts across the nation have made use of the *Reference Manual on Written Board Policies*, published a year ago by the National School Boards Association as a result of a two-year study by a joint committee of the association and the National Education Association.

The committee believes that much valuable time is saved for the board and the staff when written policies are developed. This ready-reference manual has proven valuable to boards writing or revising their policies. Such policies are also helpful to pupils, parents, and other patrons of the school in that they bring clarity, understanding, good will, direction, control, and efficiency to school operation.

Co-operating with the committee preparing the manual were experienced school board members, school administrators, teachers, and education consultants. Officials of three Illinois schools served in a pretesting pilot study before the manual was released. These schools, chosen because of their representative character and their proximity to NSBA headquarters, were the Carl Sandburg High School of Orland Park, Orland Park Elementary School, and Crete-Monee Unit School 201-U, Crete.

The manual is divided into two parts — one part gives specific suggestions and aids to the process of developing written policies and the other shows hundreds of actual examples of written policies gathered from schools across the nation.

While the basic unit is available for $35, purchasers may obtain additional copies of the first section, "How to Develop Written Policies — A Guide to Procedures," for $2 each for use by individual board members, teachers, and others. Requests may be sent to NSBA headquarters at 1940 Sheridan Rd., Evanston, Ill. ■

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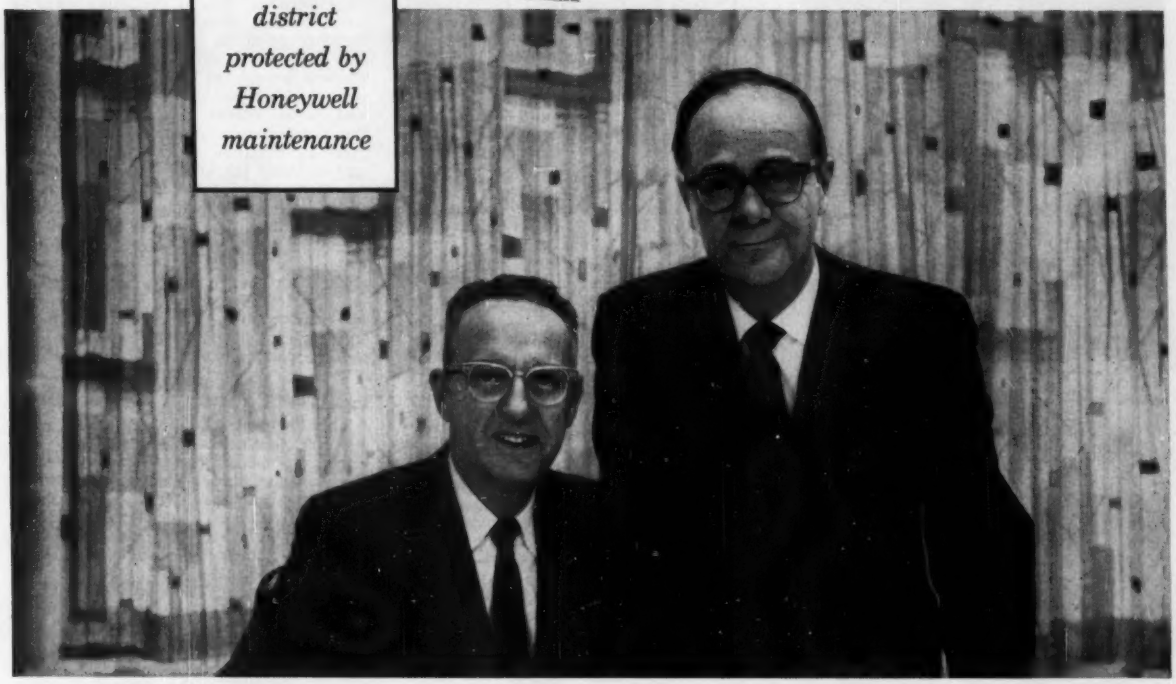

Mr. C. H. Pygman, Superintendent of Schools, and Mr. Joseph V. Lorenzo, Supervisor of Buildings and Grounds, District No. 89, Maywood, Illinois.

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what schools are doing about...

financing

Teachers College, Columbia University, in a report issued on March 19, indicated that school systems affiliated with the Metropolitan School Study Council are the best financed group of school systems in the country. Thirty-two teachers in these schools earn $11,200 each, and the top salary in one community is $13,200 a year. These communities put up more school money locally than most other school systems spend with state and federal aid.

The average per pupil expenditure of $612 in council schools this year is more than $200 above the national average. The average real-estate evaluation behind each pupil in council communities is $31,000, compared with $24,000 for the country as a whole.

Evidence of the high financial priority given the schools by council communities is shown in the tax rates and amounts raised locally per pupil. The median tax rate for all school purposes is $17.55 on each $1,000 of property valuation. The high tax rates in council districts makes possible an average local expenditure of $613 per pupil, while the average school system is providing less money per pupil from all sources.

The median salary for teachers in council communities is $7,248 in New York State, and $6,332 in New Jersey. Superintendents of schools average $19,143, with a range of $13,500 to $24,500. Senior high school principals earn between $10,000 and $16,500, with a $13,500 average.

The Metropolitan School Study Council is a voluntary group of school districts that conduct research on educational problems. It comprises 70 suburban communities in New York, New Jersey, and Connecticut. ■

overspecialization

A course in public affairs has been introduced in the Newburyport, Mass., high school. The course was initiated as one method of counteracting the danger of overspecialization, particularly among college-preparatory students in the senior year. The course aims at fostering among advanced senior students an awareness of the world and its problems, at humanizing the specialist courses, at increasing the power of logical thought and expression; and at familiarizing them with the language of controversy. It is designed to stimulate the ability and desire to acquire knowledge, to weigh evidence, to critize and evaluate, and to judge and argue. Students receive credit for the course but there are no examinations. Each student is required to write a paper on a subject elected by him and approved by the coordinator. The topics to be studied are selected from a list of titles. ■

new board members

A summer seminar in Baltimore, Md., for new school board members, initiated in 1960, aims to present background knowledge about the schools in a quick and effective way. The program, conceived by Supt. George B. Brain, is informal and informative and prepares members for discussion of matters before the board and policy decisions.

Under the plan, board members assembled at a downtown hotel once a week for six weeks to gather information about innovations, school needs, personnel matters, and budget implications in a variety of school areas. Among the topics taken up were teacher recruitment, curricula, the building program, organizing the budget, and operation of school business. The discussions were frank and friendly and gave staff members an insight into their duties and the total school program about which the public needs complete information.

As an extension of the summer course and to bring the entire board up to date on current developments, the agenda of each meeting throughout the year includes a presentation by staff members of the objectives, program, problems, and future hopes in a particular area of the curriculum. The board has listened to reports on team teaching, English, geography, history, mathematics, science, art, and music and special programs for superior and slow-learning pupils. ■

teachers' salary schedules

The Cincinnati, Ohio, board of education established in September, 1960, a new teacher-pay plan. Teachers were permitted to choose one of two plans for the receipt of their pay checks. Plan A, 195 days, gave the teacher 13 checks, one at the end of each month, and an extra one before Christmas. Plan B also provided 13 checks, each one week after the close of the 15 school-day period. Transfer from Plan A to B is permitted at any time, but transfers from Plan B to Plan A are not permitted during the school year. Pay for time certified beyond the 195-day school year is according to the schedule of summer payments of Plan A. Those on 261-day contracts will be paid on the last day of each calendar month. About one third of the teaching staff, more than 1000 persons, elected the year-round plan. ■

checking maintenance contracts

A new system of checking compliance of contracts for school maintenance and repair work has been put into operation this year in New York City. According to Supt. John J. Theobald, a reorganization of the 140-member force of inspectors, engineers, and architects is expected to result in a more objective inspection of work done by contractors, more competitive bidding for contract awards, and improved maintenance and repair of the city's 860 school buildings.

Under the plan established by Deputy Supt. Joseph T. Weiss, the present autonomous one-man inspection of school maintenance and repair projects will be replaced by a team survey performed by two, three, or four persons depending on the extent of the work. Each team will evaluate the compliance of contracts without the presence of contractors. A group of 20 architects and engineers, carefully selected from among the 140-member staff, will be assigned to inspect contract work. The remainder of the force will devote its time to a continuous survey of repair needs. Writing specifications will no longer be a duty of the inspectors but will be carried out by a separate group. Each inspector will devote 60 per cent of his time to inspecting contract work, 10 per cent to writing specifications, 15 per cent to surveying maintenance requirements, and 15 per cent to miscellaneous activities ■

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Deterrents to Vandalism

JAMES W. COLMEY and THOMAS VALENTINE

A professor of education and a school plant security supervisor combine efforts to present this article on the problem of increas- in school vandalism and the methods and techniques to combat it.

Dr. Colmey (left) is bursar and associate professor of education at Peabody College, Nashville, Tenn.; Mr. Valentine is assistant supervisor of plant security of the Dade County Schools, Miami, Fla.

During the past ten years there has been a decided increase of break-ins, thefts, and vandalism to schools. There are a number of reasons why this situation has developed. However, this article will not discuss reasons but will limit itself to methods of deterring these actions at the point of origin. It is fully realized that this is not an answer to the elimination of break-ins or vandalism, but is, nevertheless, absolutely necessary in many school systems in order to give immediate answer to the problem. This serves to gain time in order to work with the basic causes that have brought about this unpleasant situation.

The methods and techniques outlined in this article are intended to deter the negative outbursts and emotions on the part of juvenile offenders away from school plants. Though not an answer to this social problem, they definitely serve the following purposes:

1. Protect the taxpayer's investment.
2. Raise the morale of teachers, students, and the community.
3. Create a positive climate for learning.

It should be further clarified that reference is made throughout the article to juveniles, because almost three years of study in Dade County shows that over 95 per cent of the known offenders are juveniles. Since juvenile girls are less than 1 per cent of this grade, it may also be safely said "juvenile boys."

Through School Plant Planning

The first basic means of diversion to be considered is that of creating a situation where it is difficult and inconvenient for the juvenile offender to damage school property. The following is a series of construction features that should be considered in school building planning:

I. *Lighting*

1. Light parking areas.
2. Place outside spotlights in dark alcoves of buildings.
3. Strategically locate independent "night-light" circuits with minimum utility usage.
4. Arrange for street lighting around buildings.

II. *Access to buildings and grounds*

1. Fence playground with 4-ft. fence with gates to permit the entrance of children but not vehicles.
2. Fence building if it is not a compact design. (Some locations may not need this protection but many do.)
3. Install a drinking fountain on the playground. (Preferably at the end of the building.)
4. Install solid exterior doors with adequate hardware.
5. Install doors in a manner to prevent hinge pin removal.
6. Avoid design features that allow children access to the roof.
7. Design main entrance gates from floor to ceiling.

III. *Special areas*

1. Whenever possible or practical, design buildings with administration offices and cafeterias in front so they can be seen from the main thoroughfare.
2. Install guards or heavy window glass to secure windows to cafeteria storerooms and offices.
3. Separate and lock kitchen area from dining area.
4. Lock door to "dirty dish" opening from inside the kitchen.

Lighting and fencing should be given priority consideration. Carefully placed lighting will do much to discourage potential culprits from "hanging around" a building at night. Oftentimes, the dark alcoves of a building create a good meeting place for young boys. Obviously, when a meeting place is at the school, it is quite reasonable to expect that any negative action planned by these young boys might well be the most convenient one, namely, damaging the school. Adequate lighting will discourage these meetings after dark.

Another major consideration is fencing. A school without a fence is

vulnerable in many ways. A fence will prevent the following:

1. Automobiles and other vehicles from driving onto school property or parking near the building.

2. The convenient escape of any juvenile who has broken into the building and stolen something.

A twofold fencing technique is used in Dade County that effectively encourages use of the playground by children and at the same time protects the school plant. The building proper has been protected by a 6-ft. fence or floor-to-ceiling locked entrance gate, while the playground has been enclosed with a 4-ft. fence and baffles to allow easy access by children but not vehicles.

Dade County encourages recreational activities on the playgrounds but makes every effort possible to prevent children from having access to the building. A drinking fountain accessible to the playground will discourage children from trying to enter the building. Oftentimes, entrances to buildings made with good intentions such as getting a drink of water lead to vandalism activities on the part of a few misguided youths.

Access to the building must not be convenient if maximum security is to prevail. A number of possible discouragements to entering school buildings are very simple and should be included in all school planning. While it is true that school buildings should not be planned for security at the expense of an educational environment and attractive building design, there is no excuse for complete disregard of the security problem. In many instances, without detracting from the building and without a significant expenditure, the security of buildings can be improved substantially.

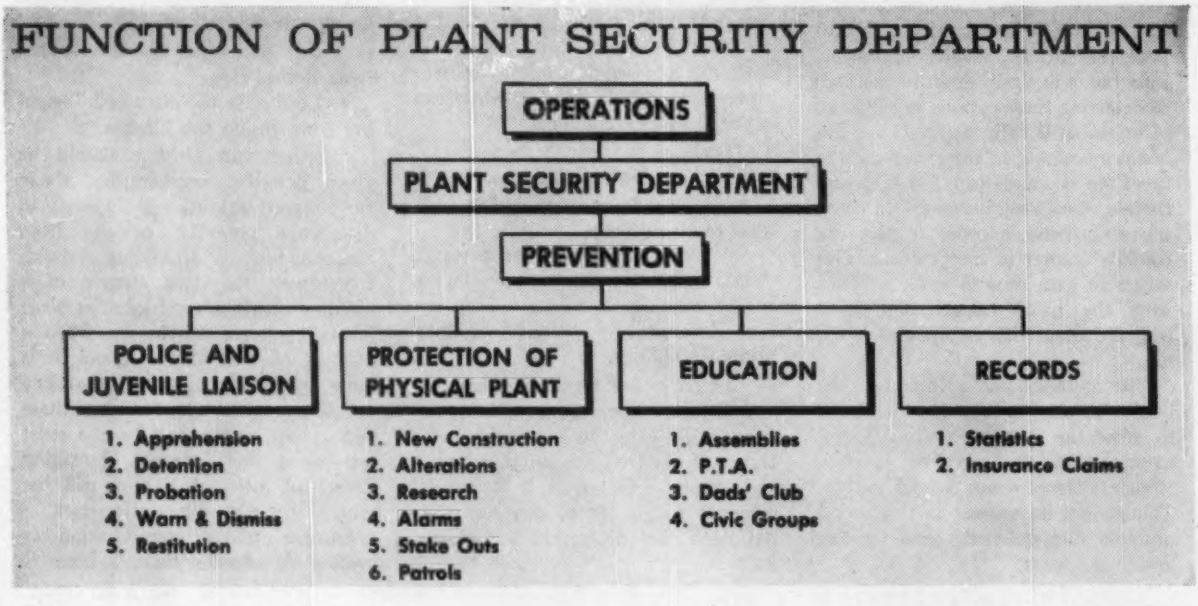
It could be said that multistory, compact buildings are not as desirable in some situations as the open-corridor, one-story, fingertype school. This article is not intended to determine school design on the basis of security alone. While suggestions made will be more important in the sprawled, one-story school, they will also be significant in the multistory buildings. The important consideration is that the building is made as inaccessible as practical when not in use.

An invitation to break-ins is to put a glass window opening sufficiently near a door. Children will inevitably break a window, reach in with ease, turn the doorknob, and be in the building. Some areas should be recognized as more troublesome than others: primarily, the cafeteria-kitchen and administrative areas. These locations should be designed with an emphasis on security. Indications are that the buildings designed with these two areas located in the front and easily seen from the main thoroughfare have less break-ins and thefts.

Thorough Administrative Action

A second basic means of deterring juveniles from damaging school property might be described as administrative techniques or policies. For example, the prominent placing of signs in school offices stating that "no money is left in this building overnight" is a good deterrent. The existence of such a sign is a big help, but it really gains impetus when it is backed up by a policy of actually having no money in the building overnight. A study of break-in problems has revealed that many break-ins are caused when vandals enter a building to take change left in a teacher's desk or the small amounts of money that may be left in the office, cafeteria, or vending machines. Usually the damage to the building and various acts of vandalism thought of after the building has been entered become a far greater problem to school personnel than the small amount of money stolen. Often school personnel tend to treat this loss too lightly, not realizing that it is not the actual loss but the attractive nuisance that is created by the presence of such money which is the serious problem.

There comes a time after a long series of break-ins in a particular building where simple deterrents do not prove satisfactory. Many times, these situations can best be corrected by actually catching someone in the act. Numerous signaling devices are used in Dade County for this purpose. The signaling device may be a light or a bell or some other mechanical or electronic device that is



tripped by the passage of the vandal into an area or through a door. These light or bell signals may alert neighbors who have been prepared to anticipate such a problem ahead of time or the electronic signal may alert a custodian or school administrator. (In communities with one police department, these devices may be connected directly to police headquarters.)

Instruction in each of these cases is to call the police and not to attempt in any way to catch or apprehend the culprits breaking into the building. While it is true that in a majority of the cases young boys are responsible for the break-ins, there have been numerous cases where adult, hardened criminals break into schools where they believe there is expensive equipment, foodstuffs, or large amounts of money. These hardened criminals and older delinquent boys should be considered extremely dangerous, and untrained school personnel should be instructed to avoid contact with them. If a program of this type is carefully developed, local police departments will welcome the opportunity to co-operate, since the persons that they capture in the schools are often the very ones that have been stealing and damaging property throughout the community over a period of time.

Another means of reducing school vandalism is to stagger the custodial schedules to the extent necessary to meet the security problem in a particular community. Large high schools in Dade County, for example, have custodians on duty nearly 24 hours a day, seven days a week. These men are not watchmen and go about doing their regular job of cleaning and maintaining the building. To some extent, every school should have some staggered scheduling that will take care of the basic problem of leaving the building unoccupied for a long period of time. Even large elementary schools can be covered by assigning one or two night custodians.

Another helpful trick is to rotate the night lighting in a building that has been frequently vandalized. This can be done by leaving a different room light on each night without following any pattern, thereby giving the impression that someone is in the building. Even youthful vandals learn quickly what hardened criminals have trained themselves to know; that a situation with an unknown factor should be avoided.

Before any of these deterrents can become really effective, a complete reporting system should be set up between the schools, administration building, and maintenance (see accompanying diagram). It is also suggested a liaison be set up with local law-enforcement agencies with copies of police reports involving school break-ins and vandalism being sent to the administration building.

A complete list of deterring techniques is as follows:

1. Restriction should be handled by the administration building where a card file is kept on all known culprits plus payments.

2. Provide police departments with an emergency list of all schools under their jurisdiction giving principals' and head custodians' home address and phone number.

3. Night lighting to be considered on an individual school basis and staggered lighting used when deemed practical.

4. Signs strategically placed at all building entrances worded "Visitors are requested to come directly to the main office before visiting within the buildings."

5. Signs prominently displayed stating "No money is left in this building overnight."

6. Whenever custodial staff is large enough, have at least one man working from 2:30 p.m. to 11:00 p.m.

7. Where there are known culprits and a break-in pattern has been established, mechanical or electronic devices may be used.

8. When situation is the same as No. 7 above, methyl violet powder may be applied to items or areas. This causes fingers to turn purple and is activated by perspiration and water.

9. Fingerprint and issue ID cards to every student (Florida juvenile law does not permit this at present).

Not one of the methods that has been mentioned in and of itself is effective. It is only effective if the administrative personnel vary the usage of each technique to the extent that together they harass and disturb vandals and make them hesitant to go into an area they do not understand. A technique that is effective but not used too often is that of setting cameras to be tripped by the vandal unknowingly or otherwise as he enters a room or a specific area of the building. Even more important than the occasional identifications that can be made this way is the psychological value of worrying the vandal. One school, for example, that had a long history of break-ins, was left completely alone without any entries for a long period of time merely by putting a cardboard box in the building after the real camera trap had been removed. By occasionally moving the box around the building, the student body believed the trap still existed. This accomplished far more than the actual equipment could ever have done.

Another deterrent that was discussed in a full-length article in the AMERICAN SCHOOL BOARD JOURNAL by the authors in July, 1960, is the parent responsibility law. If this law is regularly applied and made effective, it can do a great deal toward creating a realization on the part of the parents and community as to their responsibility concerning this problem.

The following are a number of techniques that might be used under the right conditions with some reasons why their use should be carefully considered:

1. Sensitive sound and radar signaling devices (expensive).

2. Watchdogs (not financially feasible on a small campus).

3. Night watchman (expensive).

4. Motor patrols by police or security patrols (not too effective).

5. "Stake outs" by police (practical only when given a "tip-off").

In summarizing the situation, the important thought is that a large number of administrative techniques and building considerations are needed. It is futile to search for or conclude that a single outstanding technique or answer to the problem actually can be found or relied upon. In planning buildings, the security problem should not be overlooked. There is no excuse for disregarding this problem when planning buildings just because other problems appear to be more important. An assortment of administrative techniques should be made available to school principals and central office personnel to create a harassing or unknown situation that will inevitably discourage a majority of the vandals from actually entering the buildings. ■

The author presents a recent investigation into the difficulties of maintaining standards for secondary schools by which the states hope to provide qualities of educational opportunity for all youth.

Maintaining Secondary School Standards*

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ELLSWORTH S. STATLER

Despite the heavy criticism enveighed against the present-day American high school, its phenomenal growth seems almost an equally phenomenal accomplishment when one reflects that it was only nine decades ago an institution in which practically no definitive standard existed. In the beginning of the ninetieth year of standardization and accreditation, the process has moved out of the hands of a few interested university professors at Ann Arbor, Mich., to become an institutionalized process with legalistic bases that is manifest in stated standards for minimal quality in 48 of 50 states. Connecticut and Utah are the exceptions. This phase of standardization of secondary education by the states is largely a product of the present century when the high school became an institution for education of the masses.

Certainly one of the cogent factors underlying the necessity of standardizing this rapidly mushrooming level of education stems from the unique American concept of local autonomy in government of which the local educational institution would exemplify the most infinite concept on local autonomy — so infinite that it is conceivable that our entire educational system may one day falter because of our fetish with local control over elementary and secondary education. Without the modicum of standardization provided in the states, it would seem that the "headless miracle," the American secondary school, would be open to far more criticism than it is today with all its admitted faults as well as its recognized virtues and accomplishments.

The writer recently attempted to investigate the difficulties with maintainance of these minimum standards for secondary schools by which the states hope to provide minimal qualities of educational opportunity for all youth. While some states may not cover a particular standard, the list is representative of all states which publish standards. Fifty state departments of education personnel rated these standards as to difficulty of maintenance. Table I shows the weighted ratings. While respondents were given the opportunity to check "Does not apply," meaning their state had no such stipulated relevant standard, few did this and checked, instead, "Not difficult," "Slightly difficult," "Difficult." or "Very difficult." Therefore, it could be concluded that stated or otherwise. these criteria are representative of recognized areas for standards for maintenance of quality in the nation's secondary schools.

Some of the inferences to be drawn from the data in Table I tell nothing new. Rather, they evince further substantiation of our knowledge and fears and could be used as further evidence for necessary action. States planning to revise standards could develop standards and provide supportive measures that would tend to reduce future difficulties for maintenance: For example. *stability of staff* in local schools is the most difficult area of standards to maintain, according to officials in the state departments of education. *Supervision by the principal, in-service training and professional growth of teachers, preparation of teachers,* and maintenance of adequate *pupil-teacher ratios* all fall in close proximity in the upper quarter of ratings. Moreover, these criteria are all related to personnel relationships of the school. Examination of published standards shows that the states which accredit a school make judgment on the basis of a stable staff with a minimum of turnover. Practically all states recognize these relevant criteria in standards.

It is understandable that maintenance of adequately prepared staffs is a difficulty, but the maintenance of in-service training and professional growth programs seems unusually high in face of the fact that only 17 of the states have stipulated standards with regard to these criteria. One can only conclude that much of the difficulty of maintaining programs of continuing teacher growth results from a lack of emphasis in the standards which are usually products of state departments of education and sanctioned by legislative action. In other connections in the in-

*Based upon data in Ellsworth S. Statler's *An Analysis of Current Secondary-School Standards of State Agencies and Regional Accrediting Associations* (Columbus: Ph.D. dissertation, The Graduate School, The Ohio State University, 1960).

vestigator's study he was permitted to examine the working papers of the Ohio Committee of the Commission on Secondary Schools and of the North Central Association of Colleges and Secondary Schools. In making out advisements and warnings, the most overwhelming numbers of infractions reported by schools were in the areas of staff preparation and employment.

Numerous states have provisos which support the criteria requiring or promoting the educational leadership and supervision by the principal. Some require clerical assistance for him or designate amounts of time he must devote to supervision rather than teaching. Supervision by the principal may be related to the entire staff-stability problem. Without adequate supervision, default in personnel relationships takes place as a result of a lack of leadership and co-ordination of efforts.

School plants, libraries, instructional equipment, and supplies are the next group of standards relationships which are difficult to maintain. Overcrowded schools are common; the difficulty is recognized. While the library is recognized as important by most educators, it is probable that laymen recognize its importance less and boards of education would require less persuasion to provide a text for a course or some laboratory apparatus than to provide a ratio of library books to pupils of 5:1 or 10:1. Hence, the greater difficulty in maintenance of library facilities over other equipment is understandable.

While the present study found only seven states with standards related to the gifted child, a majority at least make reference to the below average or retarded child. Again the fact that it rises to second place in difficulty of maintenance would give further weight to the conclusion that a lack of emphasis in standards lays way toward difficulty of maintenance of minimum quality of education.

The provision of adequate *financial support by the community* ranks eleventh in difficulty of maintenance. While financial support is essential to provision of adequate human and material educational resources *in toto*, it is understandable that community financial support falls eleventh rather than first in difficulty in maintenance. Most state financial support of local schools is based upon local participation. With lack of local willingness to support schools, communities may fail to garner the values of state support, and motivation for maintenance of this standard becomes more difficult.

The optimal development of the total educational program on the local and higher levels rests upon an adequately propounded philosophy of education and attendant objectives. This assumption is made by many educational theorists today. Central to the process of evaluation through use of co-operative evaluative criteria is the concept that the school should be evaluated on the basis of its stated philosophy and purposes. Seventeen states require development of a school philosophy. Twenty-two states rated this standard with varying degrees of difficulty of maintenance. Table I shows that it falls twenty-second in place and rests in the third quarter of difficulties. It could be assumed that higher rates of difficulty with which many of the qualitative standards in the upper quarter are maintained result from poorly developed or nonexistent philosophies for the schools. A philosophy is of little value unless practiced. It could be hypothesized that too little consideration is given this phase of standards promotion by the state departments in an effort to reduce the more difficult standards problems. It could be further presumed that adequate educational leadership does not obtain on the local level for development and implementation of philosophies of education.

A final inference seems plausible from data contained in Table I. The most difficult standards to maintain are those usually covered by qualitative stipulations in the standards. The greatest number of criteria usually stated quantitatively in published state standards fall in the lower quarters of Table I. It could be concluded that

TABLE I. DEGREE OF DIFFICULTY OF MAINTENANCE OF SECONDARY SCHOOL STANDARDS AS RATED BY STATE DEPARTMENT PERSONNEL IN 45 STATES

Standard	Weighted Rating
1. Stability of staff	255.8
2. Providing for gifted and atypical children	246.6
3. School plant	242.0
4. Supervision by the principal	220.2
5. In-service training and professional growth	217.9
6. Libraries	206.7
7. Preparation of teachers	206.4
8. Pupil-teacher ratio	202.3
9. Instructional, equipment, supplies, laboratories	197.9
10. Student-health services	186.8
11. Financial support by community	186.6
12. Maximum teaching load	184.4
13. Class size	184.4
14. Guidance	180.0
15. School-community relations	175.7
16. Meeting pupil needs through instructional program	173.3
17. Qualifications of principal	173.1
18. Study of local schools holding power	173.0
19. Correspondence courses	159.9
20. Pupil-activities program	153.2
21. Written courses of study	139.8
22. Philosophy and objectives	137.8
23. Summer schools	137.5
24. Specified and suggested curricula	135.5
25. Length of class period	126.3
26. Length of school day	126.3
27. Subjects required of all	124.6
28. Pupil load	149.0
29. Nonprofessional personnel	144.4
30. Rating of supporting elementary schools	140.1
31. Records and reports	137.5
32. Minimum no. pupils	135.2
33. Promotion, marks, grades	110.9
34. Units required for graduation	104.2
35. Military service J. H. S. equivalency	102.3
36. Minimum no. teachers	98.0
37. Tutoring	97.9
38. Minimum length of school year	93.2
39. Admission of pupils	84.4
40. School morale	82.0
41. Purchase of texts, according to a list	78.0

the qualitative standards are the most difficult to maintain — they require greater judgment and are more difficult to objectively apply. This leads to a further conclusion that qualitative standards need to be studied so that more definitive application may be possible and ambiguity and question reduced.

The survey also attempted to gain evidence as to reasons for difficulty in maintenance of stated standards for secondary education. Table II is a tabularization of reasons given by the state department officials. Lack of inspectional and supervisory personnel seems highly significant. Inspectional could be construed to be state department personnel while supervisory could include local personnel. Poor finance always impedes education in the modern world; it would impede the inspectional as well as supervisory services at any level. Forty states reported the number of supervisory personnel in state departments of education responsible for maintenance of standards. The range is wide with Arizona reporting one secondary supervisor for the state department of education and New York reporting 78. The average for states reporting was 9.85. Thirty-six of the 40 states reported the number of decredited high schools. In some states the figures represent all secondary schools but only decredited schools in others. Delaware had an average of 3.58 schools per supervisor in the state department of education. The Texas State Education Agency numbers averaged 298.75 schools per supervisor. This range becomes less significant when it is realized that Delaware has a unitary state school system while others have intermediate administrative organization. The latter type organization would offset the difference because of local supervisors. However, inspection and supervisory loads would seem to be excessive if the state department is charged with maintenance of established secondary-education standards. Whichever way the "pie is cut," adequacy of finance is the problem that must be faced. Not only in maintenance of local financial resources and contributions but provision of adequate resources so that state departments of education may provide the services — supervisory and otherwise — for maintenance of a sound minimum of quality education.

To the question as to relationship between size and ease with which secondary-school standards are maintained, the following responses were received.

Size of School Checked	*Number Responding*
Small, 200 or less	1
Medium, 200–500	19
Large, 500–1000	26
Very Large, 1000 or above	9
Total	45

The responses indicate that few state department workers recognize the small school as conducive to maintenance of good educational standards. Only nine checked the very large schools. Thus difficulties are greatest in the small and largest schools.

Finally the question to be dealt with here is: "What actions are taken when a school fails to meet a standard?" Over 93 per cent of the state departments of education advise a school that fails to meet a deficiency; only a simple majority checked that they gave suggestions for the removal of a deficiency. The service approach by the state departments seems lacking and it is this assistance the small school would probably need most to counteract infractions. Forty per cent of the responses show that schools are closed after a specified number of years of failure to meet significant standards of quality.

The majority permit substandard schools to exist for variable lengths of time in order to provide time for improvement in the local educational situation. However, if the state education officers cannot give essential assistance of advisory and financial aid, the educational opportunities of several generations of youngsters in a given school district may be impaired. Each generation has opportunity for four to six years of secondary education; when substandard situations are permitted to exist for a decade or more, several generations of primary individuals suffer and projected reflections in subsequent generations of human beings makes the problem infinitely greater. Lack of supervisory personnel, as previously stated, is admittedly an important reason for not maintaining higher standards and the lack of service approach by state departments of education in educational improvement is understandable though inexcusable in a nation with our material and human resources.

TABLE II. CAUSE FOR DIFFICULTY IN MAINTENANCE OF STANDARDS

Opinion	No.	Per Cent
A lack of inspectional personnel	16	35.6
A lack of supervisory assistance	26	57.8
An adequate financial structure for the educational system	21	46.7
A lack of locally felt need	16	35.6
A lack of in-service training	2	4.4
A lack of qualified teachers	1	2.2
An inability to work with community groups	1	2.2

The foregoing data would seem to permit the following conclusions:

1. Stated and established standards for secondary education in the states are aimed at bringing about order in a nation without a central educational agency and direction; they are essential if the vices of local autonomy are to be prevented.
2. Observable differences in difficulty of maintenance of standards obtain.
3. Difficulties are interrelated and are closely associated with inadequate employment of human and material resources.
4. If the standards developed for application have validity for promotion and services of a minimal-quality education, then the resources for assisting schools to meet these standards must be provided. The evidence shows that this is not always the case. Therefore, the minimum standard of quality education for all youth in a state is impeded.

One final generalization and recommendation is tendered by the writer. Careful analysis of printed standards shows considerable similarity of concept. Many states have printed standards of subjective nature which have been objectively stated so that their application becomes reasonable. However, the stated standards in some states are so sketchy that ambiguity is probable and they are unworthy of the term standard because they are a *carte blanche* and the extent to which quality is provided is only a measure of guesswork. Standards are needed and as a nation's school population increases, standards become even more important. They ought to result from the most scientific analysis which research and statistical departments make available to local and state and national governments. They should be objective bases which are understandable and easily applicable for evaluative purposes. Moreover, a minimum or optimal standard should not be stated and given legal force unless the state is willing and able to provide adequate human and material resources to help the communities that must live by minimums achieve this quality of educational standards. In the final analysis, the load must be shouldered immediately to see that public education is equipped with the requisite resources to maintain adequate standards. ■

How many new teachers are being produced in our nation's colleges? Will the number alleviate the current deficiencies in the teaching field? For answers to these questions, read this latest NEA report.

Can the Teacher Shortage Be Solved?

RAY C. MAUL

Mr. Maul is assistant director of the research division of the National Education Association.

What is the outlook for the new supply of teachers needed next September? How many prepared for the elementary grades and for each high school subject will be graduated in the class of 1961? What is the situation in each state? These are questions now confronting school employing officials everywhere, and for which the NEA Research Division seeks accurate and timely answers. The Fourteenth Annual National Teacher Supply and Demand Report, now available, presents not only a nationwide overview, but many state-by-state data as well.[1]

Many New Facts Available

Here are some of the up-to-date facts:

■ The class of 1961 will produce 139,061 bachelor's degree graduates who are eligible for standard teaching certificates. This will be an increase of 6.8 per cent over the 130,203 produced a year earlier.

■ The new prospective *high school* teachers will total 85,427, an increase of 10.1 per cent, while the new prospective *elementary school* teachers will total only 53,624, an increase of 1.9 per cent.

■ Recent experience indicates that about 68 per cent of the newly qualified high school and about 82 per cent of the newly qualified elementary school eligibles will choose to enter classroom service next September. This means that the realistic "new supply" will be approximately 58,000 high school and 44,000 elementary school candidates who can be expected to come from the 1961 class of college graduates.

■ Since elementary school outnumber high school teaching positions about 8 to 5, since the per cent of loss each year is about the same, and since the per cent of increase in enrollments will differ only a little, the division of the total new supply between the two grade levels continues to be out of balance, and the current trend is toward further extension of this imbalance.

■ The distribution of newly eligible candidates among the high school teaching fields is out of balance with the need, but the trend for the past three years has been favorable — a greater proportion of the new supply is in the fields of greatest shortage.

■ Among the high school fields, the promised gain in new foreign-language teachers is greatest, up 26.5 per cent from last year.

■ The promised increase in new mathematics teachers will be 18.2 per cent, and in science, 15.9 per cent.

■ Other above-average increases will be in English, 14.7 per cent; social science, 11.4 per cent; speech, 11.3 per cent; and art, 11.0 per cent.

■ The most notable loss will be in the new supply of librarians, down 10.1 per cent. Other below-average increases are indicated in music, 6.1 per cent; industrial arts, 5.8 per cent; home economics, 3.7 per cent; and commerce, 3.5 per cent.

■ Prospects for relief from the nationwide shortage remain about the same as a year ago. Practically all teachers who withdraw from service will be replaced next September. Also, additions to the total staff will probably correspond closely to the additions in total enrollment. But there is no indication that (*a*) overcrowding will be relieved, (*b*) half-day sessions will be eliminated, (*c*) needed new services will be added, or (*d*) wholly unprepared teachers will be replaced.

Table 1 provides further details of the distribution of the oncoming new supply among the specific teaching fields, along with the field-by-field per cent of change from last year. Table 2 shows the way in which members of the class of 1960 distributed themselves occupationally.

Conditions Vary Widely

Teachers are prepared in more than 1200 colleges and universities. The ratio of the number prepared within a state to the number employed by the schools of that state varies widely. The colleges in some states produce a supply of new graduates closely corresponding to the number of new teachers employed, while other states lean upon their neighbors for the preparation of new teachers. Also, a given state may attract a greater number of teachers from outside its borders than it loses to other states, or the reverse may be true. And the producing colleges within a given state may vary widely from those of another state in their emphasis upon the preparation of teachers for a certain field or grade level.[2]

[1] Copies of the report may be obtained directly from the NEA Publications-Sales Division, 1201 Sixteenth St., N.W., Washington 6, D. C., $1.00 per copy.

[2] The term *colleges* refers to all institutions, both colleges and universities, in which teachers are prepared to the bachelor's degree level. Junior colleges are not included.

Table I

Number of college and university students completing certificate requirements in 1961 compared with the number who met such requirements in 1960.

	Type of preparation	1961 Men	1961 Women	1961 Total	1960 Total	1960 to 1961 Net change	1960 to 1961 Percent change
	1	2	3	4	5	6	7
	Elementary School Teaching:						
1.	120 semester hours	6,830	46,804	53,634	52,630	+1,004	+1.9%
2.	90 semester hours	39	209	248	201	+ 47	+23.4
3.	60 semester hours	372	2,726	3,098	3,733	- 635	-17.0
4.	30 semester hours	53	388	441	228	+ 213	+93.4
5.	Elementary school total	7,294	50,127	57,421	56,792	+ 629	+ 1.1%
	High School Teaching						
6.	Agriculture	1,339	5	1,344	1,379	- 35	- 2.5%
7.	Art	1,030	1,987	3,017	2,719	+ 298	+11.0
8.	Commerce	2,848	4,506	7,354	7,106	+ 248	+ 3.5
9.	English	2,888	7,776	10,664	9,295	+1,369	+14.7
10.	Foreign languages	864	1,892	2,756	2,178	+ 578	+26.5
	10a French	281	913	1,194	.....	.....	.....
	10b German	104	136	240	.....	.....	.....
	10c Latin	145	158	303	.....	.....	.....
	10d Russian	16	7	23	.....	.....	.....
	10e Spanish	280	617	897	.....	.....	.....
	10f Other	38	61	99	.....	.....	.....
11.	Home economics	3	4,987	4,990	4,812	+ 178	+ 3.7
12.	Industrial arts	3,960	46	4,006	3,785	+ 221	+ 5.8
13.	Journalism	41	69	110	107	+ 3	+ 2.8
14.	Library science	54	402	456	507	- 51	-10.1
15.	Mathematics	4,358	2,325	6,683	5,652	+1,031	+18.2
16.	Music	2,539	2,977	5,516	5,200	+ 316	+ 6.1
17.	Physical education (Men)	7,771	.....	7,771	7,332	+ 439	+ 6.0
18.	Physical education (Women)	.....	3,485	3,485	3,177	+ 308	+ 9.7
19.	Science	5,798	2,451	8,249	7,119	+1,130	+15.9
	19a General science	2,371	906	3,277	2,730	+ 547	+20.0
	19b Biology	2,264	1,220	3,484	2,929	+ 555	+18.9
	19c Chemistry	741	275	1,016	979	+ 37	+ 3.8
	19d Physics	422	50	472	481	- 9	- 1.9
20.	Social science	9,617	5,088	14,705	13,197	+1,508	+11.4
21.	Speech	811	1,491	2,302	2,068	+ 234	+11.3
22.	Others	986	1,033	2,019	1,940	+ 79	+ 4.1
23.	High school total	44,907	40,520	85,427	77,583	+7,854	+10.1%
24.	Grand total exclusive of students with only 90, 60, or 30 hours of credit (lines 2, 3, and 4)	51,737	87,324	139,061	130,203	+8,858	+ 6.8%

(In some states all graduates prepared to teach any of the sciences are reported under "General" Science, as shown on line 19a. Many of these graduates have the equivalent of a full Major in Biology or Chemistry or Physics and are thus well prepared to teach one of these subjects. This fact should be recognized in interpreting the figures shown in lines 19b, 19c, and 19d.)

In 1960–61 there are just over 37,000 districts, or basic administrative units, in the American public school system. In addition to one or more employing officials in each district, some 175,000 school board members are directly concerned with the creation and maintenance of conditions which do or do not attract the needed number of competent teachers. Each of these districts is, in effect, in keen competition with many of the others.

Will the Shortage Ever End?

For two full decades the cry for more teachers has been insistent. Scarcely any need of the nation has been more widely publicized. But the needs of the immediate future exceed the prospective new supply by about the same margin as has prevailed for several years. Probably the most meaningful step forward is the gradual shift from just numbers alone to the current emphasis upon the distribution of the newly produced group among the teaching fields and grade levels. But each of the following factors contributes to the continuing shortage:

1. *Recruitment Practices.* In many school districts "recruitment" means no more than the assignment of one or more administrative officers (*a*) to visit colleges and interview seniors, and (*b*) to arouse the interest of teachers already in service in other districts. But the stern fact is that only a few districts have in operation an organized program to contribute their share of college freshmen entering preparation for teaching. Considering a 40 per cent loss between college entrance and graduation four years later, plus a 25 per cent loss to other occupations following college graduation, a district which needs *X* new teachers per year should contribute at least *X* times 2 high school graduates each year to the pool of beginning trainees in college. Teaching has a natural appeal to many superior youth.

2. *Each Demand Is Local.* The demand for a teacher is always in a specific location and for a specific assignment. In our national defense a military force can be sent to any point on a moment's notice, but the supply of teachers lacks this mobility. A teacher of the desired qualifications can be employed and retained in service only when the sum total of local conditions, or a specific factor of major importance to the prospective candidate, overshadows other opportunities. Districts at a disadvantage in one respect must create favorable conditions in other ways. Sometimes the availability of housing is a factor. Certainly working conditions and teaching load are important, as are opportunities for professional improvement and staff morale. In these respects the co-operative efforts of the administration, the school board, and the community are paramount.

3. *Lack of Competitive Salaries.* Each year the schools fail to attract into classroom service about one fourth of the new college graduates whose natural interests led them to meet the requirements for the teaching certificate. These young men and women devoted time and effort during their four years of college attendance to prepare for teaching, yet at the moment of decision they did not choose to go into the thousands of school districts in greatest need of their services. Since 1950 the colleges have produced almost 350,000 graduates well prepared for service in the classroom but who have not performed a single day of such service. The continuing shortage is not a matter of the interest of bright young men and women in teaching; it is not a matter of numbers prepared by the colleges; *the vital factor is the competition of other occupations also wanting these educated persons* prepared to perform the complex tasks now required by our society. It is inevitable that the shortage of competent teachers will continue until the financial structure of the public school system is greatly strengthened. A local community, a state, or a nation needing professionally trained men and women to perform a highly complex task must go into the open market and compete for the limited supply. It is obvious that a median salary of $5,215 is not competitively attractive. And among the three-fourths million teachers receiving less than this amount are those under the greatest pressure to make further investment in their formal preparation.

The end of the teacher shortage is not in sight, nor is it likely to be until a great majority of the districts improve their salary schedules. ■

Table II

Occupations on Nov. 1, 1960, of persons who were graduated between Sept. 1, 1959, and Aug. 31, 1960, with standard teaching certificates.

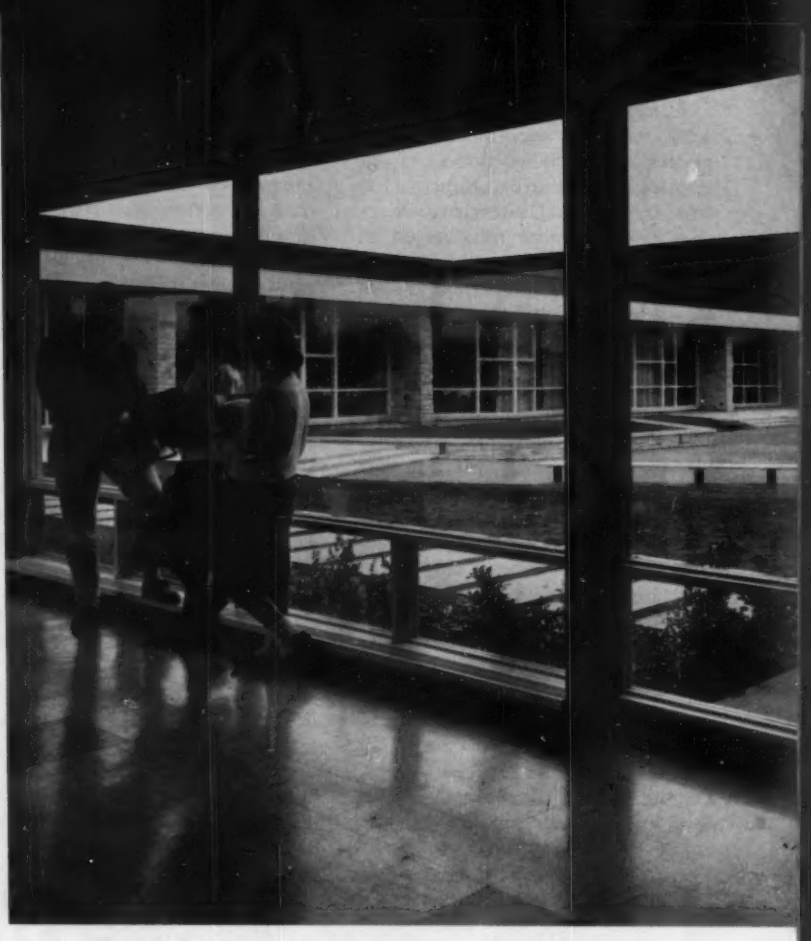
	Percent of total						
Field of preparation	Teaching	Otherwise gainfully employed	Continuing formal study	Military service	Home-making	Seeking employ-ment	Other and Unknown
1	2	3	4	5	6	7	8
Elementary school teaching	82.2%	1.4%	1.7%	0.3%	4.4%	1.4%	8.6%
High school teaching (by field)							
Agriculture	47.5%	20.7%	7.6%	8.3%	....	1.8%	14.1%
Art	70.5	4.0	4.7	1.1	4.9	3.4	11.4
Commerce	60.7	16.7	2.4	1.5	4.8	2.4	11.5
English	73.5	3.9	6.1	1.3	4.3	1.6	9.3
Foreign languages	69.6	3.4	13.1	0.7	3.4	1.4	8.4
Home economics	65.5	9.7	2.6	0.1	11.2	2.0	8.9
Industrial arts	68.6	9.4	5.0	5.0	....	3.3	8.7
Mathematics	74.2	6.5	5.8	3.5	1.8	1.1	7.1
Music	74.2	3.7	6.7	2.1	3.7	1.6	8.0
Physical education (men)	64.3	7.0	6.7	6.7	....	4.0	11.3
Physical education (women)	79.6	2.7	2.2	0.1	5.2	1.8	8.4
Science	67.5	7.5	8.1	2.9	1.7	1.9	10.4
Social science	64.9	7.0	7.7	3.5	2.1	3.5	11.3
Speech	65.9	5.2	9.0	1.4	4.9	2.6	11.0
Other	70.4	6.6	6.1	1.9	2.2	2.0	10.8
High school total	68.1%	7.4%	6.1%	2.8%	3.2%	2.4%	10.0%
Grand total	73.6%	5.0%	4.4%	1.8%	3.7%	2.0%	9.5%

The School Plant

A high school plant designed for a large number of students in academic subjects and a relatively smaller number in industrial arts, homemaking, and business education is the Homewood High School in Flossmoor, Ill. A feature of this month's SCHOOL REPORT section, the school accommodates 1500 students and represents an investment of $3,688,000.

The May SPECIAL REPORT displays three elementary school designs: the corridorless wing approach, the small-scale cluster type, and the compact finger design. All embrace workable concepts in elementary school construction.

A report on the recently completed Shelby (N. C.) High School, a discussion of the use of electric heating in schools, and an article on the current applications of stainless steel in school construction round out this month's SCHOOL PLANT section.



The Homewood High

Occupied just 15 months after construction began, the Homewood High School in Flossmoor, Ill., turned out to be an award-winning school. Architects Perkins and Will of Chicago designed the plant.

In September, 1959, the first students occupied the new Homewood-Flossmoor Community High School, Flossmoor, Ill. This school is thought to represent a record for fast-paced action since it took approximately one year from the time ground was broken until the first students walked through the doors.

Citizens first laid plans for the new district, formerly divided between Bloom, Bremen and Thornton township high school districts, in 1954. The first board was elected in April, 1957, and Dr. William O. Woodworth was appointed as school superintendent. Perkins & Will were retained as architects in the fall of 1957. In the spring of 1958 a bond issue was approved and bids were accepted in June. The school was occupied just over one year later in the fall of 1959.

The new school, with facilities for 1500 students, is located on a 77½ acre site and represents an investment of $3,688,000. Part of the cost, $1.4 million, came from division of assets agreements with the three high school districts that formerly shared its territory;

The main inner courtyard.

This view is toward unit C. The decorative tile overhang in the foreground is a corner of unit B. The glass wall at the extreme left is temporary; this is where an auditorium could be added.

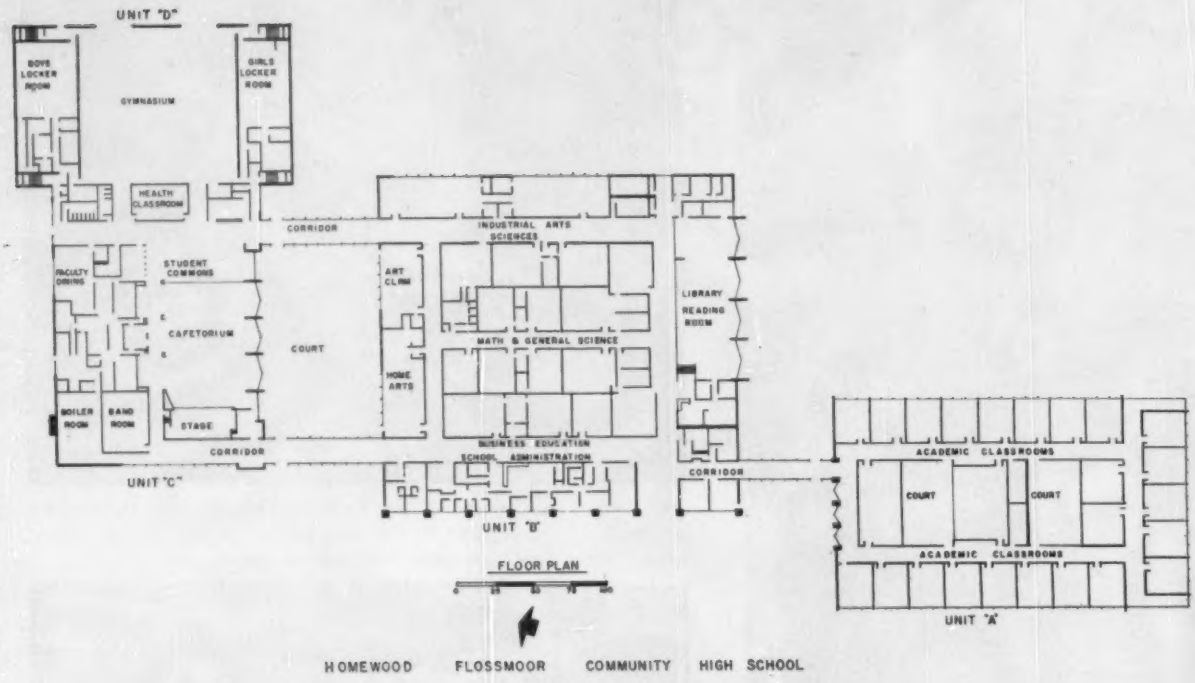
The above photo shows the cafetorium proper with a girls' chorus practicing on stage. Furniture in room is easily movable to facilitate quick changes for stage events or dances. Serving lines, out of picture at right, can be closed off with folding doors. Pictured below is the art room.

School

The school, which is partially air-conditioned, cost $15.16 a square foot.

In April of this year, the Chicago Chapter of the American Institute of Architects and the Chicago Association of Commerce and Industry awarded a coveted Citation of Merit to the school. Some of the methods used to produce this quality, award winning school are as follows:

- Bidding could not be restricted, but care was taken that invitations were issued to contractors with proved records of quality construction plus the ability to keep within time limits.
- Perkins & Will architect Wilmont Vickrey and his staff made personal and constant contact with principals supplying materials for the building



HOMEWOOD FLOSSMOOR COMMUNITY HIGH SCHOOL

PERKINS AND WILL OF CHICAGO, ILL., DESIGNED THE SCHOOL.

Facilities
classrooms, 32
art room
commercial, 3
laboratories, 4
library
music rooms, 2
industrial arts, 3
gymnasium (seating 2800)
cafetorium (seating 500)

Construction
exterior design: masonry and glass
exterior facing and trim: face brick, stone and ceramic tile
construction: steel-frame bar joists
roof: built-up
walls: concrete block
floors: vinyl asbestos
stairs: rubber tile
floor covering: asphalt and vinyl asbestos
gymnasium: concrete block with Desco, vitra glaze Wainscot
toilet rooms: structural glazed tile, terrazo floors
lighting: fluorescent with low voltage control
heating: hot water

Costs
bid cost, $2,544,564
capacity, 1500
square feet, 167,800
cost/sq. ft., $15.16
cost/pupil, $1696.38

Products
heating: boilers, Crane Co.; oil burners, Petro; air filters and ventilating fans, Trane; temperature control, Powers Regulator Co.
electrical: clocks and fire-alarm systems, Du Kane Corp.; elevator, ABC Elevator Co.
sanitary: toilets, urinals, wash bowls, and drinking fountains, Crane Co.; shower partitions, Powers Regulator Co.
general: blackboards, Chalk-Weber Costello Co.; lockers, Republic Steel Co.; laundry equipment, McGraw-Edison Co.; food-mixing and dish-washing machines, Hobart; laboratory furniture, Hamilton Manufacturing Co.; paint, Pratt & Lambert; roof materials, Tectum Co.; acoustical materials, Armstrong; folding doors, Holcomb & Hoke; glass, Libbey-Owens-Ford

to spot any "lates" or trouble spots before they occurred.

- The architects checked all shop drawings.
- The school board co-operated fully with special board meetings to approve or discuss last minute or the usual unforeseen changes. There was no waiting for regular meetings which often means loss of time.
- The architect's field superintendent reported personally and daily on progress and received verbal board approval for changes followed later by written change orders.
- Careful development and constant checking of drawings by the superintendent and members of the board of education to assure complete agreement on plans with a consequent minimum of change orders.

Present facilities include a 27-classroom building, a core building with 20 classrooms, laboratory, industrial arts, homemaking, art, library, and coffee facilities, a combined cafeteria, auditorium, and bankroom building, and a gymnasium temporarily divided for use of both boys and girls. The school's master plan, prepared by Perkins & Will, calls for an addition to bring the school up to 2000 students. It also provides for a possible girls' gymnasium, swimming pool, and auditorium.

Homewood-Flossmoor is planned as an extension of the home, rather than as a substitute for it. Parents, students, and counselors placed emphasis on careful, co-operative planning of students' courses of study and extra-class activities. Every effort was made to co-ordinate each student's program of study and activities with his previous education in elementary and other high schools and with the cultural and intellectual accomplishments gained through home and community efforts. This planning, done in the light of appropriate test data and previous school records, made it possible to group students in each subject according to ability and performance. Thus, a student who is exceptionally capable in mathematics and just fair in language skills is placed in a group of rapid learners in mathematics. Similarly, his language skills class consists of students whose language abilities are comparable with his.

A survey of the local area made by the University of Illinois several years ago indicated a limited need for vocational courses, Superintendent Woodworth pointed out. This finding was

substantiated by a tabulation of the courses students are currently taking in the high schools they are now attending. As a result, the curriculum provides for a large number of students in academic subjects, and a relatively smaller number in industrial arts, homemaking, and business education.

The architects designed the building to reflect this curriculum pattern. There are 32 general classrooms for social science, English, mathematics, and foreign languages, one physics, one chemistry, and one biology laboratory, three industrial arts rooms, one homemaking laboratory, and one art room.

The school is designed as a modified campus plan. The academic classrooms are in one wing, connected to a partially air-cooled central core containing science, industrial arts, homemaking, and art rooms, the library and the administration area. There are no study halls so extensive use is made of the large and attractive library as an educational tool. Its location, central to all other academic activities, amplifies its importance to the educational program.

A separate wing containing cafeteria and kitchen is connected to the main gym and locker rooms by a student lounging area. This wing is designed for future expansion to contain music rooms and an auditorium. Other probable expansion, provided in the master plan, is an additional wing for foreign languages and mathematics, an increase in chemistry, physics, biology, and special science facilities, a swimming pool, and a girls' gymnasium. One-story construction throughout facilitates this expansion.

"It appears we will reach 1500 enrollment in about 1962–63 so we will have to start work on a new addition at the end of this school year," Dr. Woodworth points out.

Dr. Woodworth says the district is particularly proud of its guidance staff with four full-time counselors and a director. This represents an unusually heavy emphasis on both academic and vocational guidance, he says.

The school has eliminated study hall periods, substituting supervised study sessions at the end of each class. Dr. Woodworth notes that 260 students have signed up for extra class work, provided by special classes scheduled before the beginning of regular class periods each day. If a student wishes, he says, the extra work can be combined with summer school to complete the four-year course in three and one-half years.

The theme of the Homewood-Flossmoor official dedication in late January of this year was "Consecrated to Learning." The dedication program stated:

"Planning for the Homewood-Flossmoor High School started, as it should, with the educational program. . . . Although the building was to be designed to fit into the community and onto the site, fundamentally it was to be consecrated to learning. . . . From the very start, questions of space relationships, room and building dimensions, locations of special-purpose areas and layout of each teaching space were answered by what would best facilitate the instructional program. It was found that by locating utilities in the basement, tunnels and ceilings, the classrooms could be made remarkably free for educational use. For this reason, and because time was short, a one-story school met most needs best. With fire-resistant construction throughout, and an automatic sprinkler system to protect such vulnerable areas as the stage, storage spaces, and shops, the school was made fire-safe. . . . Materials and finishes used in the construction were chosen to insure a long, maintenance-free life. Hence, brick and stone were used extensively for outside walls, concrete block for partitions, vinyl asbestos tile for corridors and other heavily traveled areas, and glass wherever it would serve a useful purpose. The combination heating and ventilation system, fueled with either oil or gas, is adaptable to air cooling of the center building thus assuring comfort throughout the year. . . . The adequate, yet low-cost building . . . resulted from . . . careful planning by . . . many people. . . . The flexibility designed into it should permit Homewood-Flossmoor High School to keep abreast of rapidly changing educational needs." ■

The library, which is the hub of the school, is pictured above. It is located near the front entrance so it can be used after hours with the rest of the school closed off. The student commons with the cafetorium in the background is shown at the right. This area is also used as a snack lounge for auditorium or gymnasium events.

The Shelby High School

MALCOLM E. BROWN

Mr. Brown is superintendent of the Shelby, N. C., public schools.

Sound educational features, low-cost maintenance and easy expansion to meet community needs are features of the Shelby High School, designed by Breeze, Holland & Riviere of Shelby, N. C.

Facilities
classrooms, 33
commercial, 2
science, 6
library
music, 9
art, 1
industrial arts, 1
mechanical drawing, 1
auditorium (seating 300)
gymnasium (seating 2000)
cafeteria (seating 450)

Costs
bid cost, $817,224
square feet, 100,000
cost/sq. ft., $8.87
capacity, 1050
cost/student, $845
exterior facing, brick and window wall
exterior facing and trim, aluminum
construction, steel
roof, built-up
classrooms, block with acoustical plaster ceilings and terrazzo floors
auditorium finish, terrazzo
gymnasium finish, wood
restroom finish, ceramic tile
lighting, fluorescent
heating, hot water

Products
heating: controls, Minneapolis-Honeywell; heating system, Herman Nelson
electrical: clocks, fire alarms, telephones, Du Kane; lighting, Sylvania
sanitary: toilets, American Standard; water coolers, Halsey-Taylor; flush valves, Sloan
general: blackboards, Claridge; cafeteria tables, Brunswick; dishwashing machines, Blakeslee; paint, Luminall; gym floors, Robbins; folding partitions, Pella; roof, Johns-Manville; windows, Lupton

Late in 1957 the Shelby, N. C., city board of education realized that existing physical facilities would not adequately care for the growing enrollment created by new industries locating in the area. A public meeting of community leaders was called in early 1958 to discuss the needs of the school district. At this meeting the P.T.A. recommended that a new high school located on a new and adequate site be considered.

The division of school planning of the North Carolina department of public instruction was requested to make a complete study of the district's needs. The survey was made in March, 1958, and it was recommended that the school organization be changed from 6-2-4 to 6-3-3, which meant that a new high school would be needed. The school board accepted the report and went into immediate action.

It was decided to have a $1,250,000 bond referendum to finance the new high school and two smaller projects. With the help of the city-wide P.T.A. council and the P.T.A. units of the district, a petition with 5000 signatures was secured requesting that an election be held in September, 1958. The voters overwhelmingly approved the issue by the greatest majority in the district's history.

Following the election, the school board selected the firm of Breeze, Holland, and Riviere of Shelby as architects and engineers for the plant.

The next four months were spent in a very careful study of possible sites. Nine sites, all located in different sections of the district, were carefully considered. The division of school planning was again called in to help make the selection. The site selected is located close to the geographical center of the district. Its 70 acres provide ample area for future expansion, adequate area for physical education and athletic facilities, adequate parking so that school facilities can be used for community activities, and sufficient room for spacious lawns and courts so as to make the entire plant attractive to its occupants and visitors.

In January the educational specifications were presented to the architects. The administration wished to construct a plant with sound educational features, low-cost maintenance, and one that could easily be expanded to meet the needs of a growing community. Economy of various features and materials was constantly kept in mind although not at the expense of a sound educational program.

Requiring approximately 100,000 square feet, the completed plans contain the following educational provisions: Regular classrooms will care for 1050 students and the special areas (lunchroom, library, gymnasium, band building, etc.) for 1500. The plant will provide four mathematics, four social studies, five English, and two foreign language classrooms (plus a language laboratory), two biology, one chemistry, and one physics laboratory. The vocational wing will contain industrial arts, home economics, art, and diversified occupation. The commercial department will consist of four fully-equipped laboratories and one distributive education classroom. In addition, the plant will have a cafeteria seating 400 students with a private dining room for special club activities, a multi-purpose small auditorium that will handle 350 students, a student activity center, a physical education plant with a seating capacity of 2000, and a band room. The entire plant will be provided with an intercommunication system. The administrative area is designed to handle a maximum of 1500 students. Each department will

An architect's perspective of the Shelby (N. C.) High School now under construction.

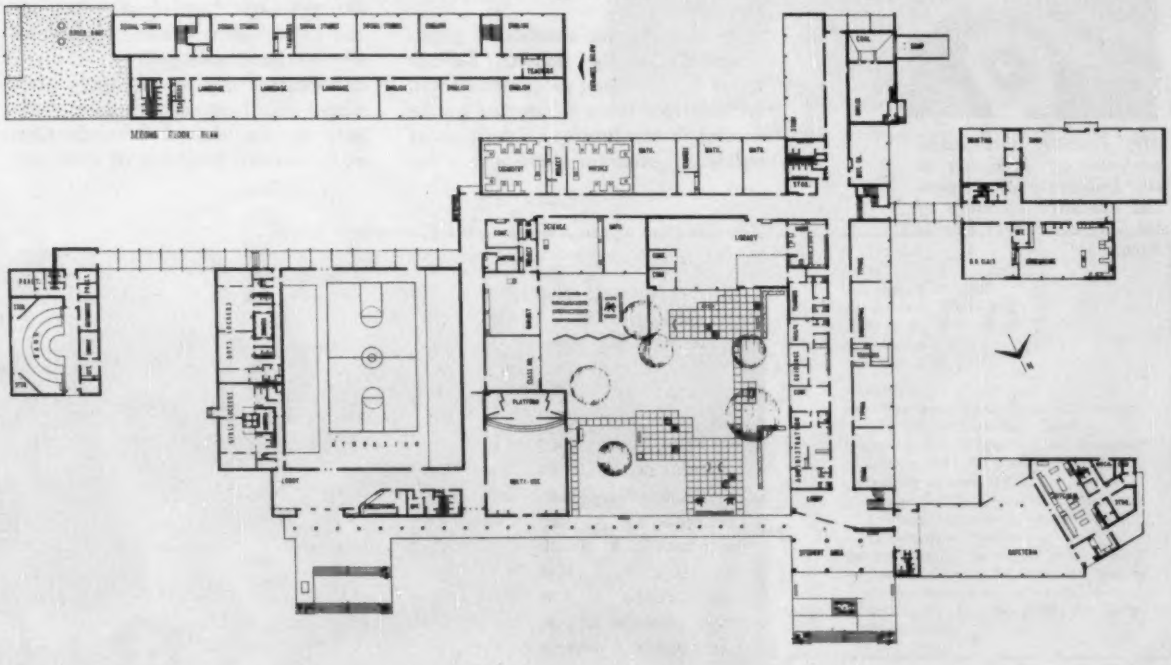
have adequate office space for all staff members, including storage space for instructional supplies. The plant, including grading, will cost $8.87 a square foot, and includes several outstanding features.

All rooms will have terrazzo floors with the exception of the gymnasium, field house, and restrooms. Glazed tile and face brick will be used in the corridors except where student lockers will be provided. Restroom interior finishes will be ceramic and glazed tile. An aluminum master projecting window wall is being used throughout the plant, featuring conservative eye-pleasing color panels. Certain areas will be air-conditioned and others will be ducted for air conditioning. The cafeteria, gymnasium, field house, locker and shower rooms, science labs, home economics labs, band building, and auditorium will have mechanical ventilation.

Classroom interiors consist of concrete block with acoustical plaster ceilings. Lighting is fluorescent throughout, with strip fluorescent lighting over chalk and tackboards. Heating will be provided by hot water wall-type lower units with fin radiation. Sufficient boiler capacity is being provided initially to care for any future expansion.

The Shelby board of education feels that it is receiving an outstanding plant at reasonable cost to district taxpayers. When the building is occupied in September, 1961, it will provide a proper environment for the educational opportunities desired for Shelby students. ■

This is the floor plan of Shelby High School, located in Shelby, N. C. Architects for the project were Breeze, Holland, and Riviere of Shelby.



Modern Ideas in Elementary School

1. The Corridorless Wing Approach

A plant that can change with changing educational need is the concept behind planning the Raleigh Court Elementary School, a small neighborhood school designed to keep the younger pupils close to home.

GEORGE W. HOLMES, III

Mr. Holmes is associate professor of education at the University of Virginia and executive secretary of the Virginia School Boards Assn.

It is difficult to establish an exact date when the planning of the Raleigh Court Elementary School in Roanoke, Va., actually began. In a sense the planning began in the early 1940's when a foresighted school board and city council combined forces to acquire, for school and recreational purposes, a one hundred acre tract of land in one of the residential areas of the city. Perhaps planning actually began in 1954 when, under the direction of Superintendent of Schools E. W. Rushton, the position of Director of Educational Planning was established in the school system. Regardless of the beginning date which might be established, the important point is that planning has not ceased. In Roanoke educational planning is a continuous process. The completion of a school plant or a part of a plant is but a step toward the goals set forth in the master plan.

In terms of the number of pupils ultimately to be housed, Raleigh Court School is not a complete plant. At least four more classrooms will be needed in the future. In the current building program Roanoke has chosen to construct several relatively small neighborhood elementary schools (six to ten classrooms each) rather than two or three large elementary plants. Thus the smaller children are kept as close to their homes as possible, thereby reducing transportation and traffic problems. As the population grows, additional wings or clusters of classrooms can be added with minimum disruption of the educational program and at minimum cost.

Directly or indirectly several hundred elementary school teachers participated in the planning. They participated by dreaming about elementary education as they think it should be. Those dreams were translated into a written description of a program by a committee composed of a representative from each of the existing elementary schools. Then the architectural firms of Smithey and Boynton and Caudill, Rowlett and Scott interpreted the educational needs in terms of plant.

Members of the Roanoke city school board, accompanied by members of the central administrative staff, traveled hundreds of miles and

Exterior view of the Raleigh Court Elementary School.

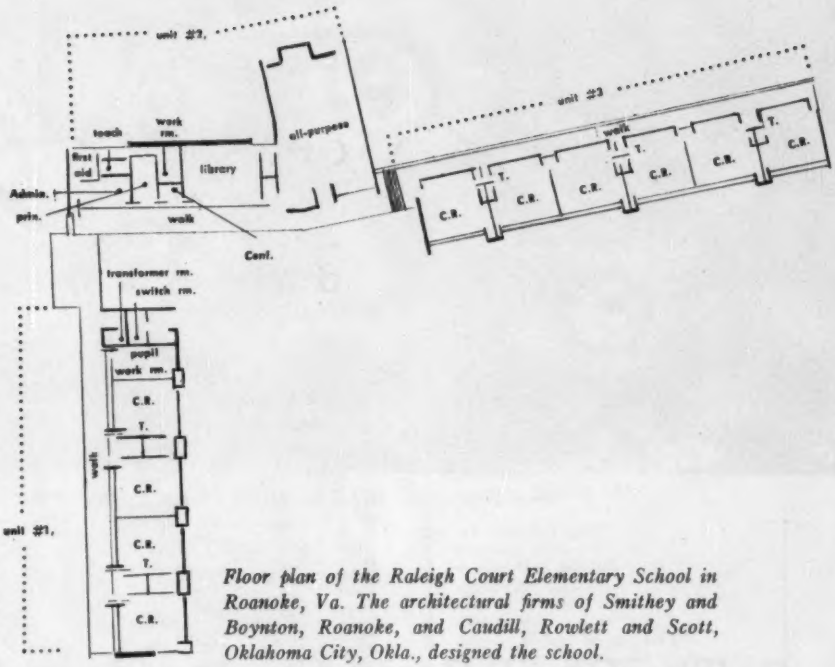
Planning

visited dozens of schools to see programs and plants in action. The end results were school plants tailored to educational needs.

In some respects the Raleigh Court plant is experimental so far as Roanoke is concerned. For example, the heating system is composed of electric unit ventilators supplemented by strategically located resistance panels. Engineering studies indicated that when such factors as first cost, maintenance, and operation of plant were considered, electricity would be competitive with other fuels. The school board said "Let's try it."

Studies indicated that lunch could be served more economically and perhaps more satisfactorily when transported from a remote kitchen to the individual classrooms. Again the attitude was "Let's try it."

Flexibility, expansibility, and convertibility were key words in the vocabulary of the designers. The Raleigh Court Elementary School is a good example of a plant which can change with changing educational need. ■



Floor plan of the Raleigh Court Elementary School in Roanoke, Va. The architectural firms of Smithey and Boynton, Roanoke, and Caudill, Rowlett and Scott, Oklahoma City, Okla., designed the school.

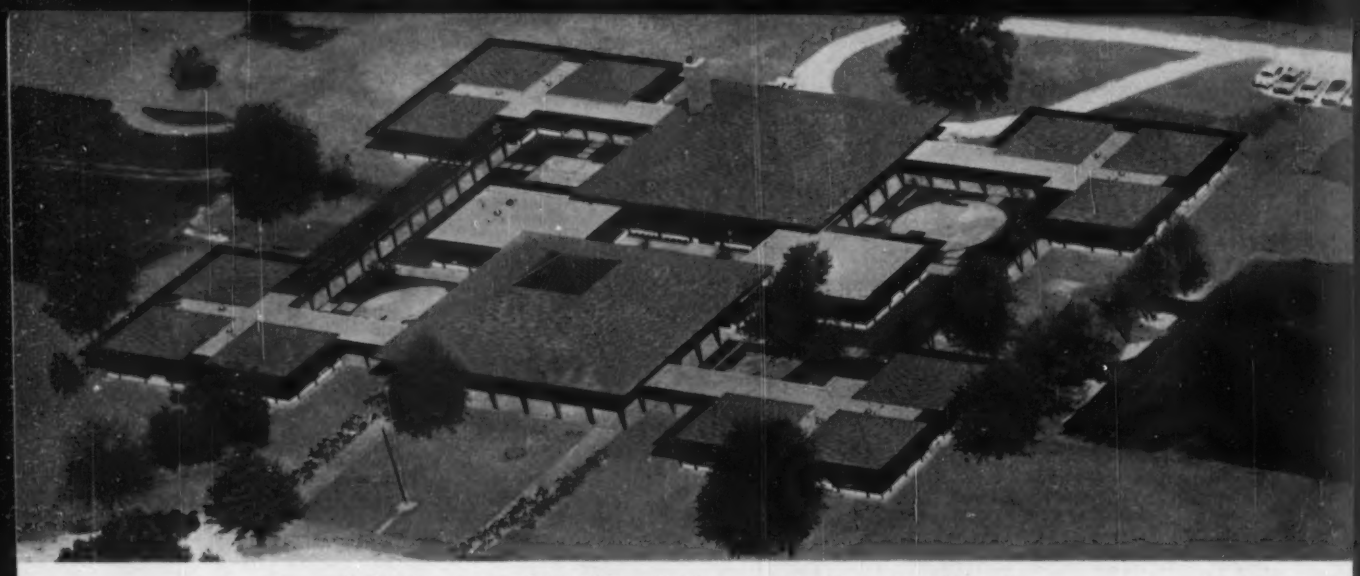
Shown above is the multi-purpose room at the Raleigh Court School.

Facilities
classrooms, 10
office
clinic
teachers' room
library
workrooms, 2
auditorium (seating 300)

Construction
exterior design: face brick
exterior facing and trim: painted metal and aluminum, porcelain enamel
construction: wall-bearing
roof: built-up
floor covering: asphalt tile
restrooms: quarry-tile floors, ceramic-tile wainscot

Costs
bid cost, $297,000
square feet, 20,115
cost/sq. ft., $13.52
cost/student, $1,019
capacity, 300

Products
heating: ventilators, Nesbitt; temperature control, Johnson Service
electrical: fire alarm system, Standard Electric Time Co.; radio and broadcasting system, RCA
sanitary: toilets, American Standard; drinking fountains, Halsey-Taylor; flush valves, Sloan
general: office furniture, ASE; pupils' desks, Griggs Equipment; folding stage, Brunswick; windows, Miami; insulation, Tectum; glass, Pittsburgh Plate Glass



Aerial view of the Mabel McDowell Elementary School in Columbus, Ind.

2. The Small-Scale Cluster Type Approach

Clusters of classrooms surround the administration area of the McDowell Elementary School in Columbus, Ind. John Warnecke & Associates of San Francisco, Calif., are the architects.

CLARENCE E. ROBBINS

Dr. Robbins is superintendent of Columbus Community Schools, Columbus, Ind.

An exciting new approach to the design of elementary schools in Indiana was introduced by the Board of School Trustees of the Columbus Community Schools and Architect John Carl Warnecke of San Francisco, Calif., with the planning and construction of Mabel McDowell Elementary School. In order to achieve a small scale, intimate school with opportunities for children to be put together in small groups and to avoid an institutional atmosphere, the school board selected a "cluster-type" plan with classrooms in small groups connected to central multi-use rooms with open corridors.

In outlining educational specifications for the building, the school administration pointed out the fact that the elementary school has a unique service to perform in the community. It is the child's first contact outside the home with the people and institutions with which he must learn to live. The building, therefore, must express the character and philosophy of the community that the child will enter. Furthermore, the atmosphere must be warm and friendly, the scale should be small and intimate, and the child must be able to develop a feeling of his identity and importance in the community. It was further specified that the building must be designed to house efficiently a high quality, diversified educational program; and in order that the school system might continue to attract and hold good teachers, the school must be a stimulating place where teaching and learning could be a pleasure.

The design for the McDowell Elementary School is based on sound and proved educational ideas. The structure and layout are practical and simple, and are particularly adapted to elementary use. The school consists of four classroom clusters located at the four corners of a square with the common use rooms in the center. Each cluster contains three individual classrooms and an entrance foyer and is connected by covered walkways to the central multi-use area. The central unit is comprised of a playroom-auditorium on the front, a separate cafeteria to the rear, with an administrative area and a kindergarten on either side. A glassed-in corridor connects the elements of the central cluster.

To give further identity to the classrooms, each has its own peaked roof. Each cluster thus resembles a group of three small houses. The same theme of the peaked roofs is carried into the larger rooms.

The layout of the school includes five landscaped courts which give a sense of spaciousness and a degree of separation to each of the units as well as to provide areas for small play activities. The design has been commended by the state fire marshall for the safety it provides pupils. Easy access to the outside is available from every room, and an effort has been made to eliminate every conceivable hazard.

The central courtyard of the Mabel McDowell School is pictured at the right.

Below is one of the 13 classrooms of the McDowell Elementary School.

Facilities
classrooms, 13
offices, 4
kindergarten
clinic rooms, 2
teachers' room
gymnasium
cafeteria (seating 225)

Costs
bid cost, $557,000
capacity, 420
square feet, 36,200
cost/pupil, $1,325
cost/sq. ft., $15.40

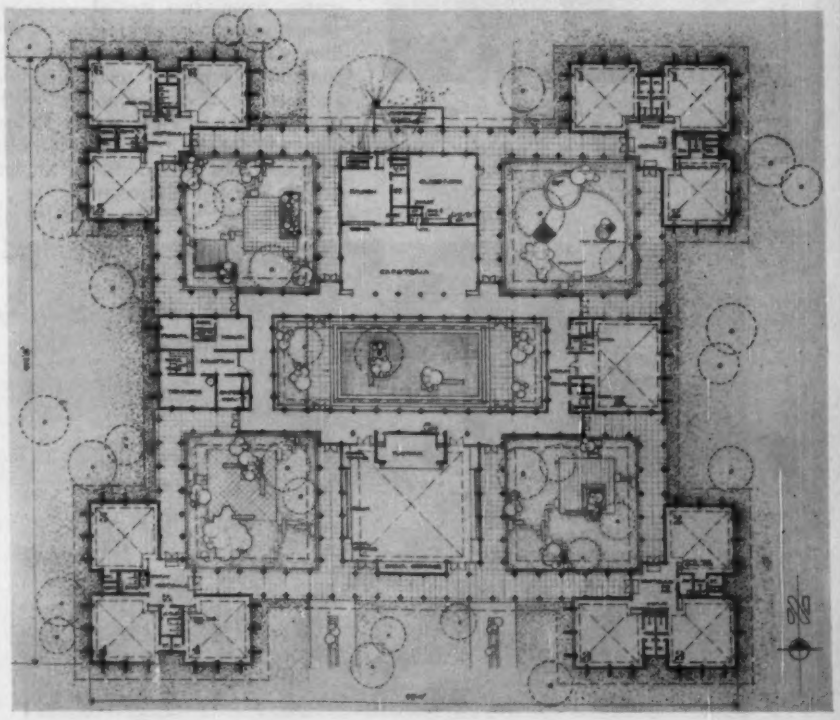
Construction
exterior facing: brick, steel trim
construction: steel frame
roof: sloping, shingled roof
corridor and stair finish: concrete and concrete block
classroom finish: concrete block and exposed construction
floors: asphalt tile
toilet rooms: concrete block walls, tile floors
lighting: incandescent
heating: hot water
insulation: wood fiber roof deck

Working with the school board and the architect in the planning of the building from the initial steps of "thinking through" the philosophy to the final stages of equipping the building, was a committee composed of two elementary teachers, two elementary principals, the director of elementary education, the director of curriculum, the director of buildings and grounds, and the superintendent. Other staff specialists were used as consultants in their areas of specialization.

Cost of the school was $580,000 exclusive of site acquisition and furnishing costs.

This school is also somewhat unique in the method whereby architectural services were provided. This Indiana community is fortunate in having many citizens willing to contribute time and money toward the improvement of the public school system. Through a program of special grants established a few years ago by one of Columbus' prominent citizens, J. Irwin Miller, chairman of the Cummins Engine Foundation Board, the Foundation has agreed to pay the entire cost of architectural services on all new school buildings constructed in the school district on the condition that the architect engaged by the school board be one selected from a group of six or more nationally recognized for their outstanding design work. The McDowell School is the second school to be completed under this program. ■

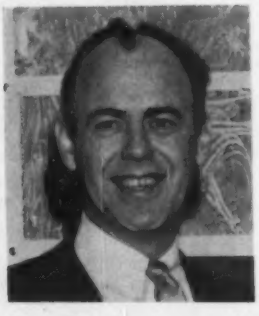
The floor plan of the Mabel McDowell Elementary School in Columbus, Ind., is shown below. Architects were John Warnecke and Associates, San Francisco, Calif.



3. The Compact Finger Design Approach

An informal, integrated plant scaled to children in the elementary ages was the idea behind the planning of Grant School in Petaluma, Calif. Architects were Reynolds and Chamberlain of Oakland.

WILLIAM R. MANNING



Mr. Manning is superintendent of the Petaluma City School District, Petaluma, Calif.

Two years of preliminary planning led progressively toward adapting a design for the Grant Elementary School in Petaluma, Calif., which would fit the community as well as the neighborhood needs.

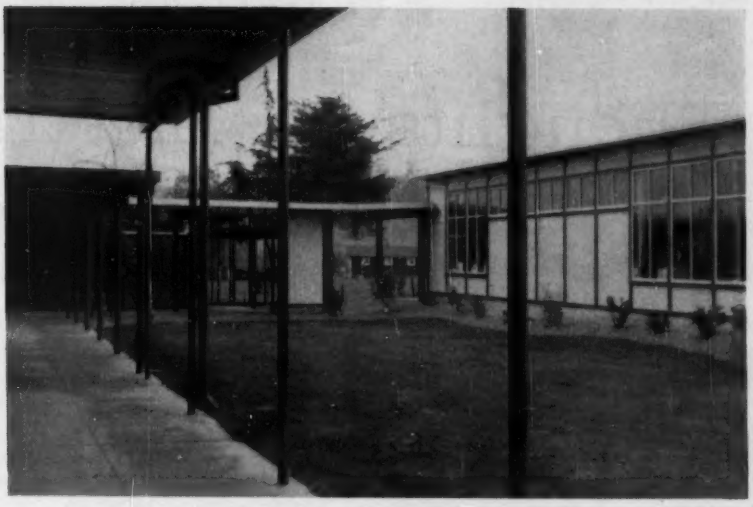
The Grant School is the fifth elementary school in the Petaluma City School District, and was planned on a 6.5 acre site as a partially complete school for an enrollment of 345 pupils. This provides for one kindergarten room, two special education rooms, seven regular classrooms, one library, and an administrative suite containing a nurse's room, a public and private office, a teachers' workroom, and a storage room. Future plans call for construction of a multipurpose room, an additional kindergarten, and five classrooms.

The building group is one story high. The elements vary in height according to the gradual slope of the land toward the southwest. Total cost of the school including equipment and landscaping was $351,160.

Framed in wood with a folded plate plywood roof, lighted by fluorescent fixtures, heated and ventilated mechanically, and interconnected by open corridors, the Grant School is the reflection of the best school planning resources possible. It is an informal, integrated school plant scaled to children in the elementary school ages.

Frame redwood construction is featured in the school. Floors are concrete and covered with asphalt tile. The school has forced filtered air for heat and ventilation, mill-made soft-

At left is a classroom of the new Grant Elementary School in Petaluma, Calif.



The inner courtyard of the Grant Elementary School.

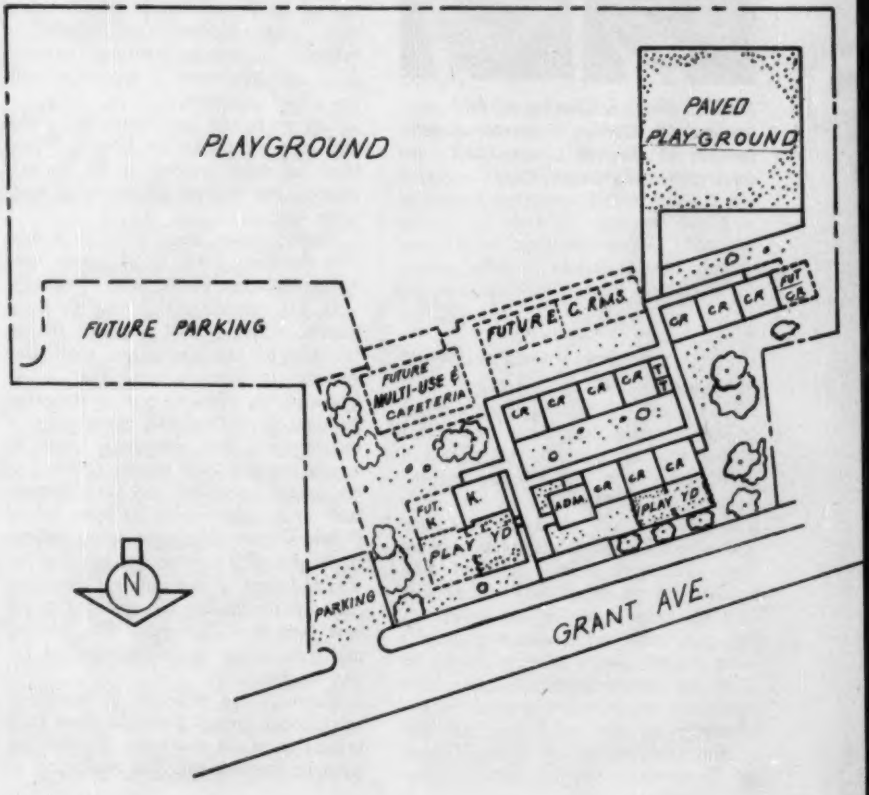
wood cabinetwork, plywood, and acoustical tile covering the classroom ceilings.

All classrooms, library, workroom, and nurse's room are equipped with running water and sinks. Each classroom can be described as "self-contained" in the sense that each provides for all learning activities.

The school plant was financed from the state aid program by the school district having been eligible for these funds by keeping itself bonded to capacity and voting to accept the special apportionments. Architects for the project were Reynolds and Chamberlain of Oakland, Calif. ■

Facilities
classrooms, 7
kindergarten
library
special education classrooms, 2
offices, 2
nurse's room
teachers' workroom
storage room
Construction
construction: frame and redwood
roof: prefabricated plywood "Trofdek"
floors: asphalt tile
heating: forced air
electrical: fluorescent lamps
doors: aluminum
ceilings: acoustical tile
bid cost, $219,000
square feet, 15,111
cost/sq. ft., $14.49
capacity, 345 pupils
Products
sanitary: toilets, urinals, American Standard
electrical: clocks, Standard Electric Time Co.; intercommunicating telephones, RCA
general: bulletin boards, Congoleum Nairn; roof construction, U. S. Plywood

Below is the plan of the Grant Elementary School in Petaluma, Calif. Reynolds and Chamberlain, Oakland, Calif., architects, designed the school.



Thoughts on Electric Heating

WILLARD FOX and JAMES GORDON

The phenomenal growth of space heating by electricity in the past few years prompted the writers to survey the possibilities and costs connected with the use of electric heat in school building.

Dr. Fox (left) is director of field services and Mr. Gordon is director of news services at Bowling Green State University, Bowling Green, Ohio.

Civilization has come a long way from the heating of caves by wood fires to the heating of space by electricity.

The phenomenal growth of space heating by electricity in the past few years, however, often has been accompanied by the nonuser's misconception that such heating — particularly in schools — is purely luxurious, extravagant, and not worth a second thought by school planners.

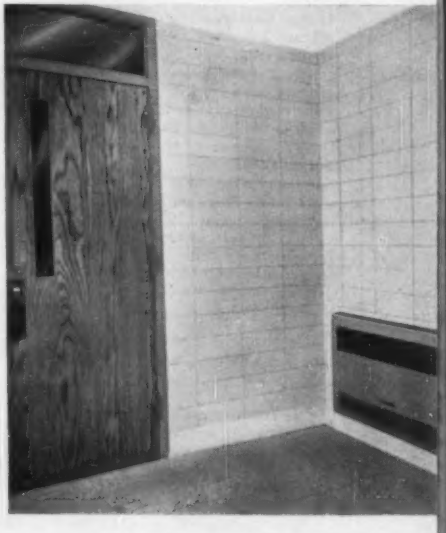
Ten years ago few homes and buildings used electricity for heating. Those that did were located in the warmer climates and in areas where energy costs were low.

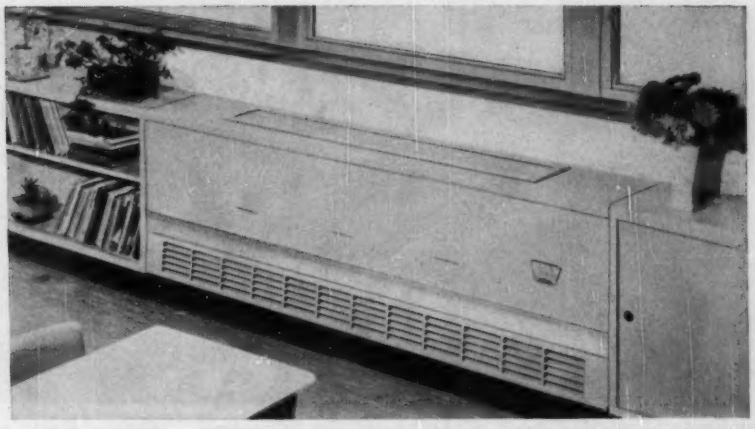
Today, more than 750,000 homes, 200 churches, 7500 motel rooms, and 300 schools are heated with electricity.

In past generations, it was the commercial buildings that provided the inspiration for the heating and ventilating systems in schoolhouses. This is no longer true. While new commercial buildings have included every possible technological and automatic advance, school buildings still require that teachers operate windows and turn thermostats or radiator valves for heat. School planners have stopped playing follow-the-leader with commercial building design and went off in a different direction. Exterior design has changed but many new schools still require that heating and ventilating be taken care of by the teacher.

Much of the difficulty in heating a schoolroom springs from the short time utilization of the classroom. The heating must be intermittent. The equipment is used primarily to warm the room in the morning. This means that a heating system must be judged on its ability to get the room temperature up to a comfort level in a short period of time and then adjust for the other heat factors. The other heat factors are the

The photo below shows a console heater, which is used to provide quick pick-up when large quantities of outside air are a problem.





A classroom unit ventilator is shown above. This ventilator can temper outside air or remove excess heat to avoid pupil discomfort in the classroom.

amount of heat given off by each child (300 to 500 BTU/hr.), the heat from the lighting system, and the solar heat gain. Thus it can be seen that the average classroom often requires alternate heating and cooling.

There is no one best type of heat or heating system to meet these requirements. Many different kinds of heating systems can be utilized with different kinds of heat sources. Electric heat does, however, have several factors in its favor.

Electric Heat Nonexplosive

First, electric heat is nonexplosive and noncombustible and hence offers considerable safety advantages. This may also lead to some insurance advantage.

Second, it is simple and does not present complex mechanisms and combustion problems that require the employment of specialists with special training and special pay. This leads to the third point, costs. The usual reasons cited to illustrate cost advantages of electric heat revolved around the elimination of certain construction costs, the advantages for flexibility in future additions, and savings in interest rates on unspent dollars.

Cost savings in new construction are achieved by the elimination of the boiler room. Boiler rooms currently cost 70 to 80 cents per cubic foot with a 16-ft. ceiling necessary. In a typical 20-classroom school these rooms cost $7,000 or more. Electric heat requires but about $1,000 for a janitor's room. The smokestack with its attendant construction costs and maintenance headaches is also eliminated. Pipe trenches for steam or hot-water heating distribution are not required. These trenches run about 40 cents per cubic foot and the saving in a typical school will run around $2,500. The mere fact that an electrically heated school building requires no boiler will save anywhere from 5 to 10 per cent of the building's initial cost.

Schools built for future expansion often have extra boiler costs just to handle rooms that might be added later. The cost of providing electric heat in school additions is not much over the cost of the room heaters. Storage tanks and coalbins are also eliminated with electric heat. Water conditioning for boiler-feed water can cost several hundred dollars per year to operate but this is not a cost factor with electric heat. Electric heat offers a distinct cost advantage in the area of maintenance costs.

If electric heat enables a school board to get the same floor space as well designed for learning for less money, the accompanying savings in interest payments can amount to 50 per cent for each dollar saved. That is, if $10,000 is saved in construction costs (to be paid for with bond revenue) the board can save almost $15,000 in total costs to the district.

Fuel Costs Increasing

There are other factors to be considered. Figures from the United States Department of Commerce for a ten-year period show the following increases in fossil fuel costs: coal up 40 per cent, gas up 23 per cent, and oil up 47 per cent. Electricity in the same period of time was down 1½ per cent. The increasing cost in fossil fuels is expected to continue. If electricity costs continue to hold, they will, in a sense, be decreasing, leading more and more school boards to consider heating with the fuel that will probably cost less in the future.

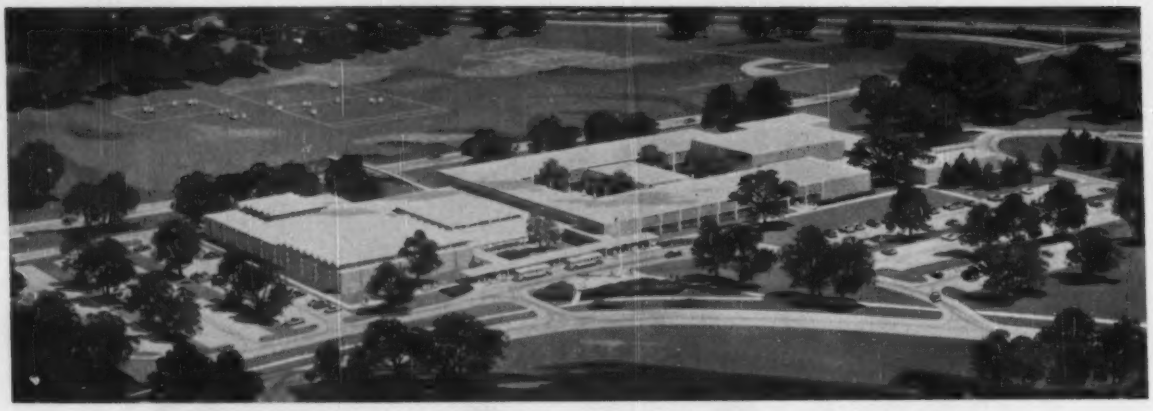
A fourth advantage that electricity has for the school of the future is its dependability. The automatic system of controls is less complex, and the possibility of breakdowns, freeze-ups, and canceled school sessions is reduced. There is no possibility of running out of fuel or necessity for periodic reordering.

The advantage of being able to heat a single room at a time should not be overlooked. Often entire school buildings or sections of buildings must be heated because a single room is going to be used at night or during a vacation or week-end period. With the proper kind of electrical heat this is no problem. Each room is heated independently.

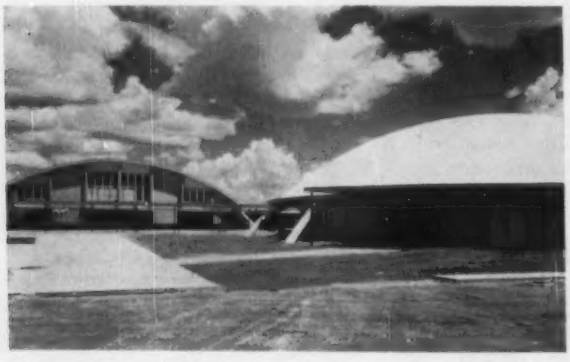
Growth in Electric Heating

If construction costs continue to favor electric heat and if the trend in fuel costs continues, school districts owe it to the children who will occupy the building 10, 20, or 30 years from now to consider electrically heating their new buildings. The advantages in safety, simplicity, cost dependability, and flexibility demand serious consideration. The question of whether electricity can answer heating and ventilating problems better than coal, gas, or oil is one each school district planning a building must answer for itself.

Cost considerations can be made now but the real price will be measured over the life of the building and in terms of the children involved. ■



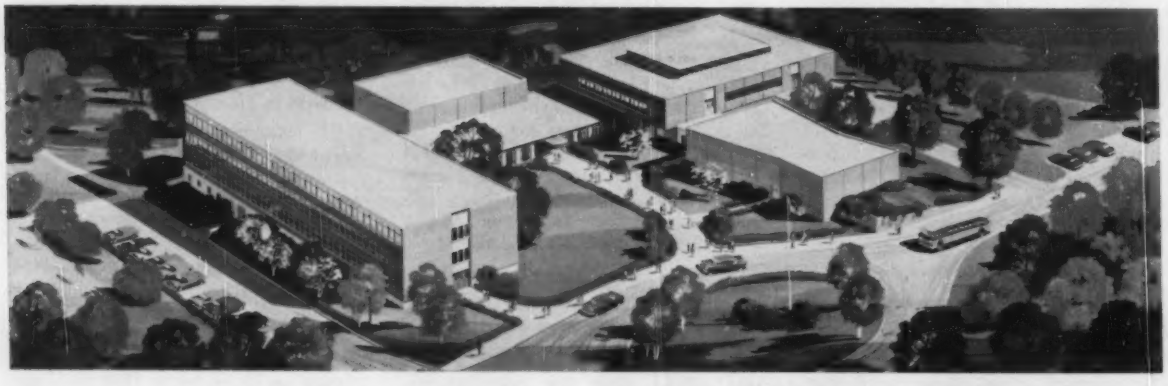
Scheduled to be opened in September, 1962, is the Mount Vernon, N. Y., High School. It will accommodate 2600–2800 pupils and have 45 general classrooms for basic academic subjects such as English, mathematics, language and social studies plus facilities for teaching science, art, drafting, music, homemaking, driver training, typing and other business subjects, home nursing and many technical and vocational subjects. Architects for the $7,500,000 school are Sherwood, Mills and Smith of Stamford, Conn.



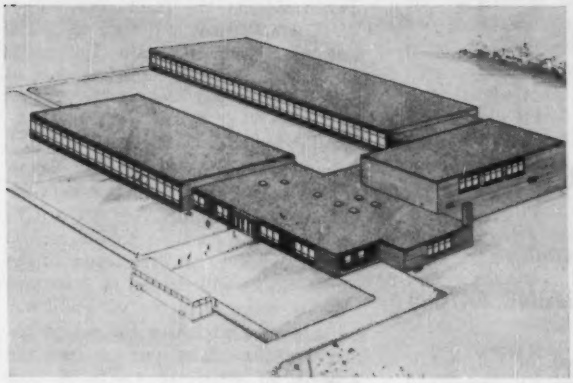
The gymnasium (left) and circular auditorium (right) of the new $1 million Tuloso-Midway (Tex.) High School are connected by a student lounge and restaurant-type cafeteria on the inside and a patio on the outside. Architects for the school were McCord and Lorenz; the school's superintendent is Noah Cunningham. Corpus Christi Caller-Times Photo

Notable New Schoolhouses

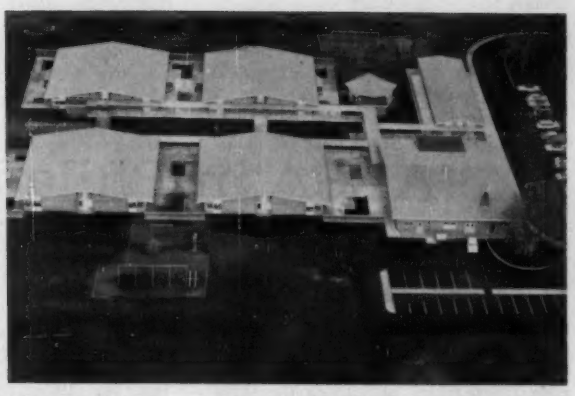
school building scrapbook



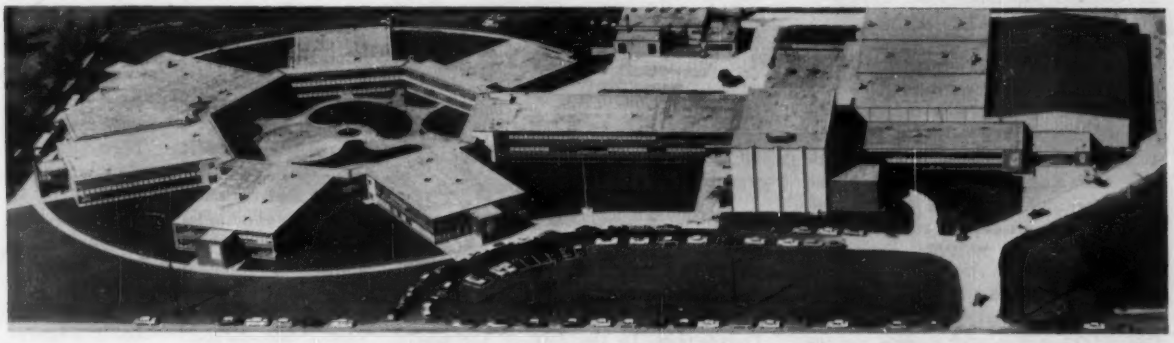
Designed by New York City architects Ketchum and Sharp, the West Side Junior High School, Wallingford, Conn., will have a three-story main classroom wing, a one-story administrative wing backed by a gymnasium, a two-story wing for the cafeteria and specialized classrooms, and an auditorium. An unusual feature of the cafeteria will be use of its perimeter for circulation space, giving access to the two homemaking, two art and two shop rooms in that wing. The $1,900,000 school will have a pupil capacity of 1000 and is scheduled for fall, 1961, occupancy.



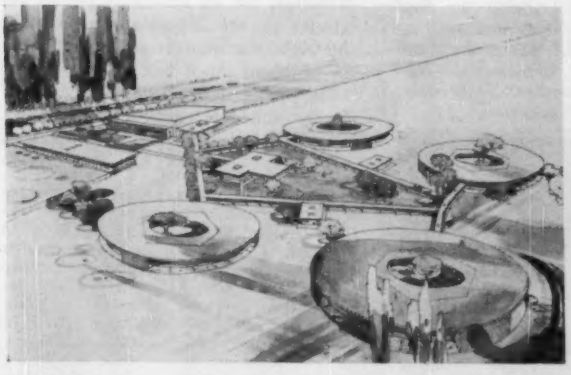
The first AmBridge Modular steel-constructed public school in Ohio is the Frost Road Elementary School, a low, rambling pastel-blue structure costing $13.29 per square foot. Speed of construction is a major feature of the Streetsboro, Ohio, school. Architects for the plant, which will be ready for occupancy in September, 1961, eight months after the start of construction, are Hunter and Howard, Warren, Ohio.



The new $527,301 Heartwood Elementary School, located at McChord Air Force Base near Tacoma, Wash., contains 16 classrooms, a library, kindergarten, multi-purpose room, kitchen, offices and auxiliary rooms. Designed by architect Donald F. Burr, the school is operated by the Clover Park district with permission of the U. S. Office of Education. Olai Haggeness is school superintendent. **McChord Air Force Base Photo**



The West Leyden High School in Northlake, Ill., features seven wings around a central court. Built to accommodate 2400 students at present, but with an expansion potential of 3400, the school cost $5,288,870 to construct. The plant includes 85 teaching stations plus special areas and has provisions for closed-circuit television and future air-conditioning in the administration wing, library, cafeteria, and auditorium. The construction cost per square foot was $14.50. Superintendent of the Leyden High School District No. 212 in which the school is located is Wade A. Steel. Architect J. Stewart Stein of Franklin Park, Ill., designed the school.



Scheduled for completion this month is the Tonopah Elementary School in West Covina, Calif. The $699,000 school contains 24 classrooms, kitchen, general purpose room, kindergarten, and has a capacity of 795 pupils. Architects Flewelling and Moody of Los Angeles, Calif., designed the building. Superintendent of the Bassett School District in which the new school is located is James C. Ketherside.

A 1960 Architectural Award of Excellence, presented by the American Institute of Steel Construction for outstanding esthetic design in exposed structural steel, went to the Dudley (N. C.) High School for its gymnasium. The 13,800 square foot gym is part of a new $300,000 physical education building, which has lightweight roof framing and a hollow-ribbed metal roof. Windows are translucent multi-color plastic panels.

The AASA in Philadelphia

ELAINE EXTON

The largest attendance of school officials (more than 10,000) of the three 1961 regional conventions of the American Association of School Administrators and the largest number of firms exhibiting products (365) were registered in Philadelphia, March 25–28, providing a fitting climax to these parleys and to the AASA presidency of Forrest E. Conner, superintendent of schools, St. Paul, Minn.

As at the San Francisco and St. Louis gatherings *Education for the Challenges of Tomorrow* was the Philadelphia convention theme. Although the organization of the program encompassing seven general sessions and over 80 group meetings was essentiallly the same at all three conclaves, the cast of speakers, panelists, interrogators, and platform guests was for the most part changed.

At the General Sessions

Members of the "Panel on Education in Other Nations" were a notable exception. Abdul Majid Abbass, visiting professor of Middle Eastern studies at American University, Washington, D. C.; C. E. Beeby, New Zealand ambassador to France,; T. H. E. Chen, head of the department of Asiatic Studies, University of Southern California; and Hans Reimers, chairman, Education Committee, Standing Conference of Ministers of Education in the States of the Federal Republic of Germany, appeared in all three convention cities to describe major goals and movements concerning education in their countries.

A high point of the Philadelphia program, not scheduled at the San Francisco and St. Louis meetings, was the always popular presentation of the Golden Key Awards offered annually since 1956 to an American who has contributed significantly to the national welfare and to a teacher he considers has decisively influenced his career.

Admiral Arleigh A. Burke, the Chief of U. S. Naval Operations, was selected as the recipient for the coveted honor this year by the Golden Key Council composed of the heads of seven major educational organizations. He in turn named Warren L. McCabe, presently the administrative dean of Polytechnic Institute, Brooklyn, N. Y., who had taught him chemical engineering at the University of Michigan in 1930–31, as the teacher whose insistence on high standards had encouraged him to do his best.

The use of speaker-analyst teams to explore general session subjects bearing directly or indirectly on education was one of the interesting innovations at this year's regional work conferences. Through this technique the address of an expert in a particular discipline was followed by an evaluative commentary by a well-known AASA member pointing up the implications of the specialist's speech for education.

"New Perspectives for America's International Economic Relations," "Military Horizons in the Missile Age," the "New Politics," and "Social Class and Personality Development" were examined in this fashion, for example, in Philadelphia. In the case of the first-named topic the speaker-analyst team was composed of Raymond Vernon, professor of international trade and investment at Harvard's Graduate School of Business Administration, and Sam M. Lambert, director of the research division of NEA. In the case of the last-named subject the team consisted of W. Loyd Warner, professor of social research, Michigan State University, and Calvin E. Gross, superintendent of schools, Pittsburgh, Pa.

Forrest E. Conner (right), St. Paul superintendent of schools and retiring president of the AASA, passes the gavel to the new president, Benjamin C. Willis, Chicago superintendent of schools, at the Philadelphia convention.

Challenges to Education

Inspired by the conference theme, few speakers failed to put some challenge to the educators. Admiral Arleigh A. Burke, for instance, told a general session audience that "the future of the United States will depend . . . on men who are educated in the values of our heritage, men who have the determination, the strength of purpose, and the strength of character to fulfill that heritage."

But, he counseled, "character can only be formed in youth. 'As the twig is bent, the tree inclines.' . . . The real preparation for a military career still remains in the home, in grammar schools, high schools, and colleges. That is why we in the Navy want the young men and women of America to stay in school, to complete their education, to graduate."

"The young men who will defend our nation, the young men who will mold its future," the Admiral challenged, "are now in schools, in *your* schools. . . . I envy you for the opportunity that is yours, the opportunity to determine the kind of nation that America will be a generation from now."

Sam M. Lambert, who directs the NEA research division, called on educators to ask themselves these questions: "Are our teachers really prepared to deal with the economic and social problems that are plaguing the world today and which will probably become even more serious in the years to come? Are our text materials and supplementary materials providing what they should provide? And, since we cannot hope to anticipate all of tomorrow's problems, are we aiming at getting the citizens of the future ready to make the right decisions regardless of what the problems might be?"

He urged action on four "gaps" closely related to education and the international scene which he identified as follows:

"First is the enrollment gap between the fifth grade and the twelfth grade in the United States. Do you know that only 60 per cent of our American boys and girls who are reaching the fifth grade manage to get a high school diploma? If we are going to outproduce the world in brain power so that we can lead other nations in selling the results of innovation and change, we are going to have to do something about this tremendous waste of human resources. . . .

"Second is the voting gap — the difference between the number who should vote and the number who do vote. During the past three presidential elections the percent of persons of voting age who did not vote

were 35 per cent in 1952, 40 per cent in 1956, and 35 per cent in 1960. . . .

"Third is the teacher gap. Although we are suffering from a shortage of qualified teachers for our own classrooms, we should be in a position to export teaching talent to help in starting new schools in underdeveloped countries where more than 90 per cent of the people are illiterate. These people cannot participate in their own domestic, economic, and political development without educational aid from the more advanced countries. Because ignorance and freedom are incompatible, education — as an export commodity — is just as important as food, capital, and technical assistance. . . . .

"Fourth is the college gap. . . . Despite the fact that we are already bursting at the seams in our own colleges, we should be in a position of bringing to this country some of the best of the young men and women in these underdeveloped countries. I would even advocate subsidizing 50,000 to 100,000 scholarships for foreign students every year. This could well be one of the best investments we could make as a part of a world-wide good neighbor policy."

Federal Aid

At several different times the convention spotlight turned to federal aid to education. The provisions of President Kennedy's three-year program of nearly $2.3 billion dollars worth of aid to public schools for teachers' salaries and/or school facilities as embodied in bills S. 1021 and H.R. 4970 were analyzed on two occasions — first by Dexter O. Arnold, assistant superintendent of schools, Concord, N. H., at a group discussion considering "What's Cooking on Capitol Hill?" and later by Edgar Fuller, executive secretary of the Council of Chief State School Officers, in a breakfast talk before members of the Michigan Association of School Administrators.

A resolution adopted at all three AASA regional meetings "wholeheartedly pledges [the association's] support to the principles upon which the [Kennedy] program [to provide federal financial support for public elementary and secondary schools] is based [and] urges the Congress to make appropriations to the states consistent with the requests made by the President, to be utilized as the states best see fit to improve the quality of public education."

Upholding this viewpoint at a press conference, Forrest E. Conner in his role as AASA president said "massive federal participation in the support of public education is needed to provide quality education in the face of ever increasing difficulties."

He stated that "the practice of categorical grants by the federal government — greatly accelerated by the National Defense Education Act — should be stopped as soon as possible," maintaining that "with relatively few exceptions general aid is much sounder than categorical bargains or matching proposals — which are an expense to administer, fraught with distasteful controls, complicated by federal red tape, and a major roadblock to a broad curriculum that should be balanced among the sciences, mathematics and the humanities, including the fine and creative arts."

Group Meetings

The group meetings offered a varied bill of fare from which the conference-goer could select the ones most relevant to his own interests and problems. Every level of education received attention from "Small Neighborhood Schools for Young Children" to "Pressing Issues in Public School Adult Education."

A number of the groups discussed the training and performance of school personnel. While some focused on the role of the principal, the school psychologist, or the guidance counselor, others took up such problems as "Why Superintendents Get Fired" and "The Effects of Administrative Behavior on Teacher Morale."

For those wishing to keep abreast of National Education Association projects there were sessions scheduled on "The Big Job Ahead of the Committee for the Advancement of School Administration," "A Proposed Project to Study Teacher Competence" (meeting planned in co-operation with the National School Boards Association and NEA department of classroom teachers), and "What's the Score on Testing?"

Or, a school administrator or board member might attend meetings devoted to such subjects as "Push-Button School Facilities," "Putting the Plus in School Food Service," or "Fundamental Principles of Teaching and Learning That Are Frequently Violated in Planning School Facilities" and then go to the exhibits for a firsthand view of the new techniques, materials, and equipment which might aid the school staff to upgrade the educational program.

A Look at the Exhibits

The vast array of modern teaching aids and of materials used in building, furnishing, equipping, and servicing school buildings and transporting children to them did indeed as H. I. Willett, superintendent of schools in Richmond, Va., stated "carry many suggestions for spending money wisely in developing and maintaining quality education."

Although the traditional classroom was predominant in most of the 250 school building plans displayed in the special architectural exhibit at Philadelphia, innovations in mechanical equipment, in the use of space, in the artistic elements of design, and in over-all structure were apparent even from a casual review.

Featured, not as striking departures from past practice but as appropriate solutions to meeting the problems of particular schools, were such developments as geodesic (earth-shape) domes, planetariums, use of signal lights in place of bells, and interior classrooms.

There was evidence of a growing awareness that schools need a general area like a commons as well as the more conventional instruction space. Among the methods shown for providing flexibility were movable partitions to permit ready conversion of teaching space into small units for 10 or fewer pupils or a room large enough to accommodate more than 300 students.

It appeared that libraries were being put to broader and more functional usage. Slides, recordings, films, photographs, and packets of materials as well as books and standard reference volumes were grouped together in instructional materials centers in some of the exhibits. ■

Present and past AASA presidents met at the Philadelphia convention. Left to right, seated, are Virgil M. Rogers; Benjamin C. Willis, new AASA president; Forrest E. Conner, and Philip J. Hickey. Standing are Jordan L. Larson; John S. Cartwright, member of the executive committee; H. I. Willett; Herold C. Hunt; and Finis E. Engleman, executive secretary.

Do School Boards Want General Federal Aid?

ELAINE EXTON

Where do America's school boards stand on the thorny issue of federal support for education? This question is being asked with increasing frequency on Capitol Hill. Unless local school board members and state school board associations clarify their positions and provide their own answers to this question, lobbyists and representatives of special interest groups are ready to speak for them.

Because both the friends and foes of general federal school aid realize that the action at this session of Congress could be decisive for years to come, each side is attempting to marshal all the strength it can muster. Both are vying for the support of school boards in the increasingly bitter struggle and are seeking to given an appearance of having the nation's school boards in their corner.

As Congressman John Brademas (D., Ind.) put it in addressing an NEA-sponsored meeting: "Failure of the present Administration bill (H.R. 4970 and S. 1021) might mean a long-term setback for the federal assistance for public schools." "If we lose," NEA Legislative Commission Vice Chairman Dexter O. Arnold, Assistant Superintendent of Schools in Concord, New Hampshire, told a school administrator's gathering, "it may be a long time before there is such a favorable opportunity."

Outlook in Congress

Because of President Kennedy's active leadership in behalf of federal public school financing, a factor not as strongly in evidence in the Eisenhower years, and the firm backing of Secretary of Health, Education, and Welfare Abraham Ribicoff and the new U. S. Commissioner of Education Sterling M. McMurrin, leading federal education aid proponents are convinced that now is the time for an all-out push for the enabling legislation.

William G. Carr, the National Education Association's Executive Secretary, has repeatedly praised President Kennedy's proposal for a $2.3 billion three-year program of grants to the states for public elementary and secondary schools which would let the states decide their own priorities between teachers' pay, or school construction, or a combination of both of these, as "clearly in accord with the platform and resolutions of the National Education Association" and has pledged his organization's support "without 'ifs' or 'buts.'"

No previous Administration, in fact, has backed so strongly exactly what the National Education Association wants in the way of general public school financing by the Federal Government.

Many church and private school leaders are equally determined that if general federal financing of education is to take place there must be some easing of their own financial burdens. This might be accomplished, as they see it, either through the form of tax credits to parents for funds spent on school tuition, grants-in-aid to private school students, or long-term low-interest rate loans for school construction. In their view such assistance should be made available by the Federal Government to offset the impact of additional public school aid on the ability of private schools to adequately staff and to maintain the quality of their programs.

This development poses new hurdles for the Administration's controversy-laden school-aid proposals which already are being buffeted by civil rights cross-currents and the expected thrusts of known opponents to any further transfer of responsibility for school finance to the Federal Government.

In May 1960 a 4-year $1.3 billion school construction bill (Representative Frank Thompson's H.R. 10128 as amended) squeaked through the House by a narrow 17-vote (206 to 189) margin and later died when the House Rules Committee failed to send it to conference.

The fact that about 21 of the Democratic Congressmen who voted in favor of this aid-to-education measure failed to return to Congress this year and have for the most part been replaced by conservative Republicans, few of whom may support such a bill, was adding to the anxiety of the federal-aid advocates.

Although the hearings by the education subcommittees of the House and Senate have been completed on the Administration's school-aid measure and many witnesses have testified pro and con, it is difficult to predict, as this article goes to press, when (or whether) the legislation will reach the floor of the Senate and the House for action.

Proponents are pressing vigorously for early consideration believing the bill's chances may be best during the "honeymoon" period of the Kennedy Administration. They argue that "its beneficial effects will commence with the new school year provided Congress acts promptly." They also urge that it should have priority over other education measures such as H.R. 5266 to authorize college scholarships for undergraduate study and construction loans for higher education "academic and related facilities."

While some educational spokesmen were expressing their belief that the Kennedy program "has a good chance to pass, IF: *school administrators, school board members,* and *all* interested in better education give support by contacting Congressmen and giving emphasis to the need for passage of the *Bills,*" this optimism was not unanimously shared by Capitol Hill observers.

A number of seasoned reporters of the Washington scene were convinced that teachers' salaries aid could not pass the House this year, especially in view of the expressed opposition of House Speaker Sam Rayburn (D., Texas) and the liberal Republicans represented by former Health, Education, and Welfare Secretary Arthur Flemming. Aware of

the formidable obstacles there, still others said tersely of the bill: "It's dead for this session!"

As Pressures Mount

In the first half of 1960, with an expenditure of more than $77,000 to obtain passage of a school-support bill, the National Education Association had already topped for that period all other pressure groups registering under the Lobbying Act of 1946.

To cope with the tantalizing new circumstances, the NEA stepped up its lobbying drive throwing the vast resources of its national body and state and local affiliates more fully into the federal-aid fight than at any previous time and bringing into play "high-pressure" tactics not usually associated with professional groups. A studied effort was under way to create an impression of "massive" public support and to make it appear that all persons interested in education should climb aboard their bandwagon for federal aid.

Their new maneuvers for involving prominent members of outside organizations in NEA's legislative program have caused other civic-minded groups to question where a line should be drawn between desirable co-operation with other agencies for worthy causes and an invasion of their own organizations' right to freedom in reaching policy decisions on public questions through their own democratic processes.

Perhaps the foremost illustration of this strategy has been the attempt to convey an impression not only to members of Congress and their aides but to leaders of national organizations and of state and local education associations that "there's been a change in school board viewpoints on federal aid."

This line is being peddled on Capitol Hill. Moreover, federal-aid proponents are working for a shift from the National School Boards Association's present policy of neutrality on general federal aid to education to an endorsement of it which they are hoping will take place when the School Boards Association annual meeting convenes in May in Philadelphia.

Lay Conference on NEA Bills

An unprecedented step was taken in seeking the assistance of officials of state affiliates of other national groups in the promotion of NEA's legislative program on March 19–20, 1961, when a "Lay Conference on School Legislation" was convened at the NEA headquarters in Washington.

Invitations to this meeting jointly signed by NEA President Clarice Kline and Executive Secretary William G. Carr were sent, NEA officials explained, to outstanding lay leaders in each state whose names had been furnished by the Executive Secretaries of its affiliated State Education Associations. But, through some strange "coincidence," as it turned out, the majority of those who came were either the presidents, vice-presidents, or legislative chairmen of state PTA's (31 in all) or presidents (past or present) or executive secretaries of State School Board Associations (12).

In accepting the NEA invitation which promised "your expenses of travel, hotel and meals will be borne by the NEA" and suggested "if you can attend the conference, it will be helpful if you will let your Congressman and Senators know that you will be in Washington. Time will be set aside Monday afternoon for visitations on Capitol Hill," a number of the recipients made plain that they could only come on an informal basis and not as official delegates of their groups.

Although these requests were heeded in preparing the "Roster of Pre-Registration Participants" printed in the conference program which gave no titles after their names, subsequently officials of NEA units on at least two occasions publicly claimed the conferees had been present in an official capacity or had committed themselves to support the NEA stand on the Kennedy program.

A press statement released by the National Education Association to publicize the meeting reported, for example, that Congressman John Brademas (D., Ind.) had addressed "a group of presidents of State School Board Associations and Parent-Teacher Congresses from some 33 states." Only five incumbent presidents of State School Board Associations were actually there, however. Even if past presidents and other State School Board Association officials are counted, the total is only about 12.

On March 26 the situation boiled over at a session aptly titled "What's Cooking on Capitol Hill?" during the Eastern Regional Meeting of the American Association of School Administrators in Philadelphia, when John M. Lumley, the director of NEA's Federal Relations Division, in answering a question on what his organization was doing to enlist public support said that presidents of State Congresses of Parents and Teachers and directors (officers) of State School Board Associations are supporting the Administration bill in more than 30 states.

Mrs. James C. Parker, the president of the National Congress of Parents and Teachers, who was in the audience then sought the floor. Pointedly but refinedly she replied:

"I want to say that the National Congress of Parents and Teachers has not gone on record officially in favor of the Administration school-aid bill. There was a meeting called by the National Education Association and a number of State PTA Presidents were invited to hear the NEA position on the Administration bill. We are still in a position of studying all the pending school aid measures. The National PTA has approved over the years a program of federal-aid-to-education with a maximum of local control and a minimum of federal control."

NSBA's Wire

Another illustration of the concern evinced by federal-aid supporters about the attitude of the school-board group was demonstrated at the recent hearings on the NEA-backed school-aid bill before the House General Subcommittee on Education chaired by Representative Cleveland M. Bailey (D., W. Va.).

A wire that had been received earlier from Roy O. Frantz, the president of the National School Boards Association, was placed in the record of the hearings on March 14 at the conclusion of the testimony of Roger A. Freeman, Research Associate at the Institute for Studies in Federalism at Claremont Men's College in California, who had said: "None of the tens of thousands of state and local boards of education has appeared to testify against it. The National School Boards Association has refused to endorse or support federal aid."

Mr. Frantz's telegram which simply stated the official policy of his organization in support of the American tradition of the separation of Church and State was not read aloud since Chairman Bailey merely stated: "At this time I would like to submit for inclusion in the record a telegram from the National School Boards Association." So concerned was NEA's William G. Carr when he learned of this action that he dispatched an emissary to Capitol Hill to find out its contents.

Webb an NEA Delegate

In an interview reported in the March 3 issue of the *NEA News* Glenn Snow, NEA's Assistant Executive Secretary for Lay Relations, is quoted as saying: "NEA's continuing co-operation with great American voluntary organizations in determination of school policy is typified in the Conference of National Organizations to be held March 5–7 inclusive, in Chicago."

All told some 29 major national organizations, including those of farmers, veterans, labor, businessmen, and women's clubs, were represented by delegations of two to five members at this meeting on the "Balance of (International) Payments" to which NEA

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the editorial stand

FOR BETTER DECISION MAKING

IN LIEU of the usual editorial, we are printing below a statement on local school control which has been under fire from a group of educators intent upon substituting professional control of education on state and/or federal levels. The paper is slightly shortened from an address made by Dr. John M. Foskett, professor of sociology at the University of Oregon, before the San Francisco convention of the American Association of School Administrators, February 28, 1961. The discussion provides an informative analysis of the problems of local versus centralized control, and lay versus professional control. It makes clear that there is as much obsolescence in professional and central control as there is in lay and local control. In the editor's opinion, the paper provides an effective answer to the continued efforts to remove the schools from the area of democratic government by the present combined work of lay school boards and professional superintendents and to place them in the hands of rather small and remote professional groups.

WILLIAM C. BRUCE, EDITOR

Local Control: Folklore and Obsolescence

John M. Foskett

The title of this paper suggests that local control of the schools is part of American folklore and is an obsolete practice carried over from the past. I have a feeling I am expected to agree with such a view. This I cannot do. The title also suggests that more centralized and professional control would be better. Again, I cannot support such a proposition. However, to relieve your minds, I am not going to defend local control as such. What I am going to do is try to restate the problem of control in a way that will yield some significant answers.

I think we can agree that we have not had the kind of school administration we have a right to expect. To put it simply, there are just too many cases of substandard educational programs and too many instances of pressure group domination of school policy. There is too frequent a rejection of proven educational practices and too much persecution of teachers and administrators. The conflict of interests where the schools become innocent victims is all too common.

In view of these and other inadequacies, one is tempted to conclude that the difficulty is due to local control. It is also easy to conclude, that putting control in the hands of professionals or in centralized agencies, or a combination of both, would bring about some kind of an educational millennium. The problem is not this simple. In passing, I would remind you that there is much more folklore and obsolescence in areas where there has been and is professional and/or centralized control. There is as much folklore in such areas as medicine, law, and higher education, if not more so, as in public education. There is as much obsolescence in our medical, legal, and college institutions, if not more so, as in our publicly controlled local school systems. I know of no evidence that a professionalized and or centralized control of the public schools would avoid the pitfall of tradition and obsolescent practices any more than has been the case in other areas. I cannot see that much would be gained by substituting one body of folklore or outmoded policies for another. I would hold that the problem is not whether the schools should be administered at the local levels and by laymen or at other levels and by other agencies. Rather, the problem is how to get rid of folklore and obsolescence, be it at the local or any other level. This problem leads to a discussion of the basic and central problem of decision making.

One of the most important needs of modern societies is that of making sound decisions, whether it involves business or industrial enterprise, a military operation, an international crisis, racial tension, or changes in the curriculum of a school. If modern societies go down the drain it will not be because someone developed the atom bomb or because people became morally and spiritually soft, but because we failed to develop an effective way of arriving at decisions. The old phrase, "It's the decisions that kill us" may be fatally true.

Internationally, nationally, regionally, and locally, we are in trouble. Much of our trouble results from the fact that we are using decision-making procedures from the past that are inadequate for the present. Some of these decision-making procedures date back several centuries and some, I suspect, were inherited from our tribal ancestors.

There is a curious contrast between our ability to make decisions as individuals on the one hand, and as groups of *individuals*, on the other. During the past few centuries we have devoted a lot of attention to the manner in which *individuals* reach decisions. We have examined with care the nature of the mental processes; we have developed basic rules of logic and evidence; we have identified the main sources of bias; and we have set up elaborate menus of gathering and disseminating facts. In a way, the purpose of the public school program is to train people to make better decisions as individuals. While much remains to be done, we have made a real effort to improve *individual* decision making. Today, most people have some capacity to arrive at sound decisions regarding their affairs, if they choose to do so, and in general they do a surprisingly good job.

However, we have done little about decision making by groups of individuals or about issues that affect a number of people. Groups of people, be they families, cities, states, nations, boards of directors, or the citizenry of a community, are like individuals in that they are recurrently faced with problems and issues that require some kind of a decision as to what to do. They must decide whether or not to add fluorine to the water supply, whether or not to require teachers to sign a loyalty oath, whether or not to establish a federal medical care program, or whether or not to introduce foreign languages into the elementary school.

For whatever reason, we have not felt it necessary to examine with care the manner in which communities of individuals arrive at decisions. We have assumed that the democratic process alone, without any other arrangements, would solve all our problems. We have assumed that a decision made by a number of people somehow must be sound; that a decision which comes out of a conference room as the result of deliberation must be correct. These are false assumptions. Be they laymen or experts, there is nothing about a group decision that makes it automatically and necessarily sound. If group decision making is to be effective it must be carefully implemented.

The Picture Is Changing

There is some evidence that the picture is changing. For some years, large scale industry, for example, has become increasingly aware of the importance of the way company decisions are made. A few years ago the Ford Company was in serious trouble. Sales were dropping. Time after time decisions turned out to be wrong. A review of the organization and operations of the firm revealed that their decision-making procedures were dated from Model T days and were not appropriate for current

production and market situations. The Ford Motor Company was extensively reorganized and a new decision-making procedure was instituted. You know what the results were. Decisions now turned out to be the right ones and sales climbed sharply. The Ford Company was able to do this, not because they asked who should make the decisions, but they asked "How are decisions being made?" Incidentally, they violated their new decision-making procedures in the case of the late Edsel car, and the results were disastrous.

Elsewhere, in other industries, in the military, and even in the national headquarters of the Republican and Democratic parties, people are beginning to examine and remodel the manner in which fateful decisions are being made. More and more, it is being recognized that we can no longer afford the luxury of bad decisions.

Let me turn now to the question of policy formation in the public schools. For a long while we have coasted along on the assumption that if we would just elect a school board of responsible citizens, hire a good administrative officer, hold school elections, and appoint a lay advisory committee, the resulting decisions would be sound and all would be well. History has proved that it is not this easy. These things in and of themselves are good, I am certain, but they do not insure sound decisions.

I am encouraged by signs that public school people are beginning to give attention to the decision-making process itself. This is coming about slowly. As best as I can judge, people in the field of education began thinking about policy making during and right after World War II. However, the situation at that time was unfortunate in that the schools were under attack from many quarters and the question of policy formation was developed within a negative framework. The question in the late forties and early fifties was, essentially, How can we avoid attack? The question should have been, How can we arrive at defensible decisions? As a consequence, there followed an emphasis on public relations, the identification of power structures, the stimulation of citizen participation, and the appointment of advisory committees. This was the era of appeasement.

It was within this generally negative and defensive framework that the activities of the Cooperative Program in Educational Administration, despite the efforts by the W. K. Kellogg Foundation, were carried out. In setting out to improve educational administration, the projects of the CPEA, in general, tacitly assumed that educational administration somehow was to blame for whatever difficulties existed. The obvious solution was to strengthen educational administrators which meant, for the most, further training in the art of appeasement. This negative and defensive orientation served to delay the time when educators would address themselves to the basic problem, that of decision making, be it at the local or national level, by laymen or by professionals.

As indicated at the outset, the issue of citizen or democratic control versus centralized or professional control is a *false* issue. The real question is not who makes the decisions or where, rather, I think, the question is, How are the decisions made regardless of who makes them? The local citizenry can and has made sound decisions. They have also made some pretty terrible mistakes. Professional educators can and have made many sound decisions, but they too have made some horrible errors. The notion that decisions made at one level or another, by one group or another, are automatically sound is part of our folklore. To persist in an argument concerning the relative merits of either is to delay the time when we find ways to maximize the chances of making good decisions.

Elements of the Decision-Making Process

I have been talking about sound decision making without making clear the basic principles involved. While there are many elements to the decision-making process and more than one way to state them, I think the essentials can be summarized briefly: First, typically, attention is arrested by some difficulty, a felt need, a new situation, or a breakdown of an old arrangement. Examples would be: overcrowding of schools, a shortage of teachers, new and higher college admission standards, integration orders, or a demand for more emphasis on science. The second step is the restatement of the difficulty in the form of a question or problem that can be investigated. This is a crucial step for without it we can only fall back on folklore, personal opinion, or pressure from some group. People simply cannot think constructively if there is not a well-defined problem to think about. It is nonsensical to ask people to arrive at or accept sound answers if such answers are not related to an original question.

Third, there is the gathering of data or information relevant to the problem and which must be examined before a sound decision can be reached. Frequently this data is not immediately at hand but must be secured. Neither the citizenry nor the professionals carry around in their heads or their brief cases the information required for most decisions.

Fourth, there is the analysis or processing of the data to produce an answer. Data themselves are sterile and gain meaning only when systematically analyzed with reference to a specific question. While we recognize these elements in individual decision making and in scientific research, we often ignore one or more of them when it comes to group decision making. All too often, when a community is faced with a problem, the first three steps are ignored and attention is turned immedately to the last step, the conclusion.

For instance, in one community the citizenry voted bonds to finance a new city library. Shortly thereafter, a question arose as to where to build the new structure. Immediately there followed months of vigorous argument for and against each of three proposed locations. The community was hopelessly split. Finally, however, someone asked the simple but important question — "What is the problem of location?" All were agreed that the problem was to find a location that provided access by pedestrians, by private automobile and by public transportation; that provided parking space; that was central; and that offered sufficient space. Once the problem was thus clearly stated, relevant data was gathered in terms of available land, traffic patterns, and the like. Once these two steps had been taken and the information had been made publicly available, it was apparent to everyone that one of the proposed locations was much better than the other two. A decision, and apparently a sound one, was reached not on the basis of a power struggle, nor arbitrary decision, nor folklore, but on the basis of sound decision making.

All too often, public school officials ask the citizenry to make or accept a specific decision without specifying the nature of the problem involved, and without providing the relevant information. In the absence of a clearly defined problem and without the necessary information, no decision can make sense. The citizenry cannot understand a proposal to change the grade in which a given subject is first introduced, arithmetic for instance, if they do not know what the problem is for which the proposed change constitutes a solution. It is for this reason that folklore so often prevails.

Informed People Are Reasonable

By an large, lay people, be they voting citizens, members of a school board, or members of a lay committee, are reasonable and surprisingly enlightened if they understand the problem

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WASHINGTON

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sent the new Acting Executive Director of the National School Boards Association — Harold Webb — as a member of their delegation.

In addition to Harold Webb and Mr. Snow the NEA team was composed of Karl H. Berns, NEA Assistant Executive Secretary for Field Operations; NEA President-Elect Ewald Turner, Crafts Teacher, Helen McCune Jr. High School, Pendleton, Ore.; and H. C. Weinlick, Executive Secretary of the Wisconsin Education Association.

Would it have been surprising if the organization leaders seeing the tie-up of a National School Boards Association official with the NEA representatives there had gained an impression that the school boards also share NEA's views on domestic solutions for financing American education?

Although the National School Boards Association has never been and is not now an affiliate of the National Education Association, one would think from some of NEA's recent actions that it is trying to influence the schools boards as if they actually were NEA constituents.

A Play for Power

Evidence continues to mount that intertwined with the drive to achieve general federal support for teachers' salaries and school facilities is a striving for power and for professional control. This was made plain, for instance, in an appeal Ivan A. Booker, NEA's Director of Membership, sent last fall to enlist the help of NEA life members in an "each one reach one" recruitment campaign. "The trend toward a fully unified profession is under way," Mr. Booker wrote, "increasingly we see that in the united effort of local, state, and national associations lies the secret of success and power."

"When the NEA a million strong (its membership then was 714,000) can speak with a majority voice to the public and to decision-making groups," he prophesied, "its accomplishments and influences will be stepped up tremendously."

Independence Imperative for NSBA

Regardless of whether school boards and their state and national associations favor or oppose federal financing of education, the National School Boards Association *must* remain an autonomous organization in order to realize its full potential as a national group and to reflect the effort and concern of local communities about the course of American education.

Only if school board members maintain a sturdy, independent organization of their own which reflects their individual and organizational thinking will their views be recognized as valid and important. The policy positions which emanate from the organization as such should be truly indicative of the attitudes of its members and stem from its own constitutional processes for policy determination and program development.

As long as the Virginia School Boards Association, for example, functioned as a subsidiary of the Virginia Education Association the stands it expressed had no real stature. It was only when it achieved separate status a few years ago and became an independent voice of the lay leadership of Virginia's school system that the school boards in the state began to make their views effectively heard in the state legislature. Comments a Virginia school board member familiar with the situation: "It doesn't make sense for employers and employees to be part of the same organization."

Similarly, at the national level, if federal officials think the National School Boards Association is dominated by professional organizations and that they can obtain the support of school board members through these other groups, presidents will not have time to address their meetings, Congressmen will be too busy to listen, and the personnel of government departments will fail to give their pronouncements on public questions the attention that they merit.

Philadelphia, the cradle of American independence, will provide an appropriate place and opportunity for American school board members to openly express their continuing commitment to independence in thought and action. ■

EDITORIAL

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and have access to the relevant information. At the same time, they can be surprisingly unreasonable and stupid when they do not know the real problem and do not have the relevant information.

Again, all too often, professional educators are expected to make decisions without having an opportunity to identify the problem and to secure the requisite data. Again, lacking a clear definition of the problem and working without facts no intelligent decision can be made. As with laymen, they too must then fall back on professional folklore and obsolescent practice. The holding of advanced degrees and the occupying of high offices do not make one an expert. Like laymen, they will arrive at sound decisions only when they ask the right kinds of questions and examine the right kind of data. Educational administrators are reasonable creatures and surprisingly enlightened when they understand a problem and have access to relevant information. But they too can be inept when they do not.

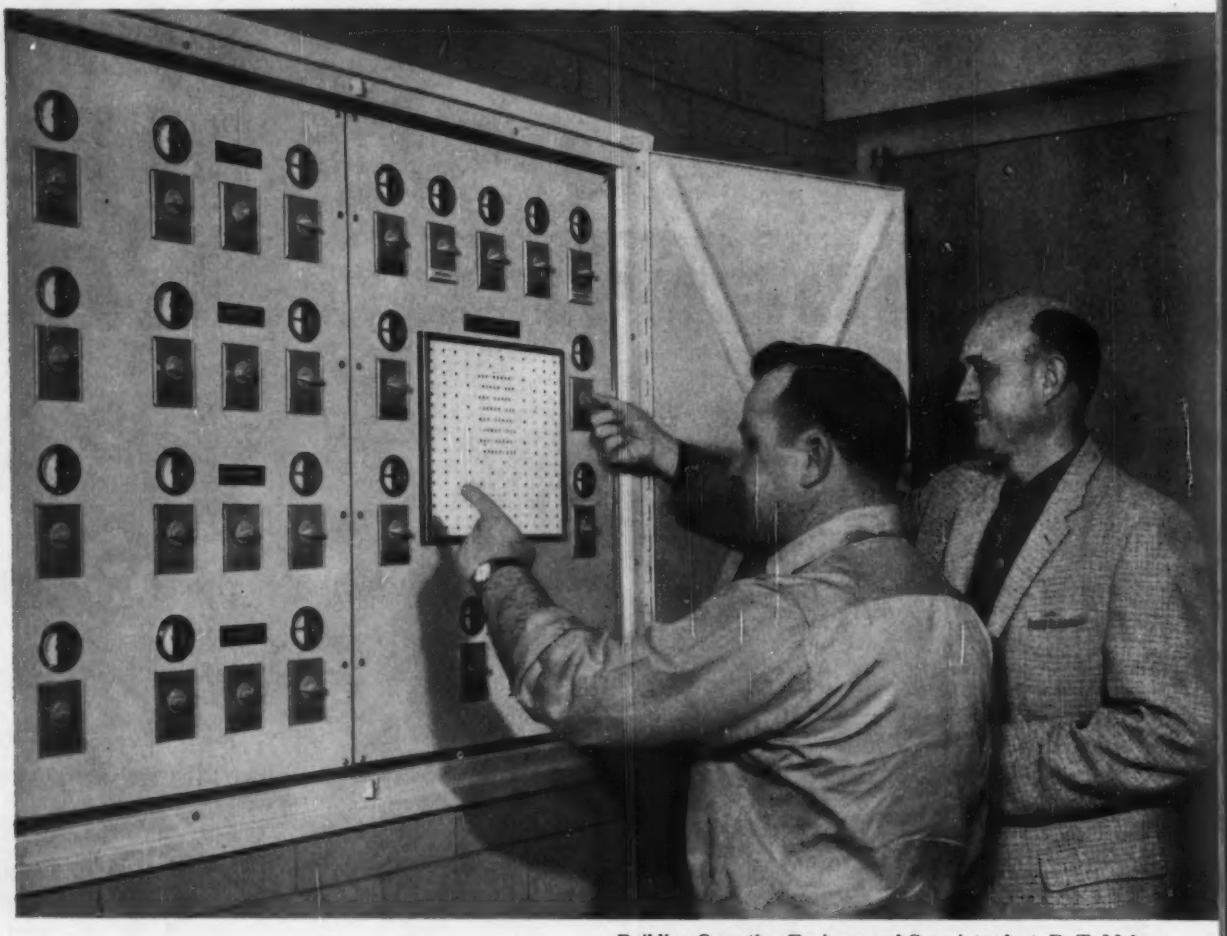
Now, I suspect some problems can be most conveniently and effectively handled at the local level and some at other levels. Some can perhaps be best handled by laymen and others by experts. This is another matter. Regardless of how the decision-making job is divided up, ways must be found to develop a sound decision-making process.

The task of developing and implementing a sound decision-making arrangement is not easy, particularly when many individuals are involved. For instance, it is not enough to provide the citizenry with the news and notes kind of information so often released through the mass media. General information divorced from the basic problems and needs will be interpreted in terms of the interests and biases of the individuals. In recent research we found that the amount of information held by people did not affect their image of the school superintendent. What did affect the image was socioeconomic status. Lower class people tend to have the same image of the superintendent regardless of how much information they have about the schools and their administration. The same is true for middle and upper class people. Apparently, there is a tendency, in the absence of a focal problem, to use data to reinforce a cultural perspective. Ways must be found, then, to provide people with a clear picture of problems as well as the information that bears on these problems. Only then can selective perception be avoided.

Apparently, the general defensive position taken by school administrators, including school boards, has resulted in an unwillingness to get problems out in the open. It is for this reason that folklore so often prevails. It is very significant that communities, like individuals, often make their best decisions when they are confronted with a severe crisis. After a tornado the problems are out in the open.

In conclusion, I would like to restate the topic. For "Local Control: Folklore and Obsolescence," I would substitute "Local Control: Folklore versus Decision-Making." While there are real dangers in initiating an effective decision-making process, at the local or any other level, the dangers of not doing so are even greater. ■

— John M. Foskett



Building Operating Engineer and Superintendent, R. T. Malone, and Capital Improvements Inspector, J. S. Youmans, at the lighting section of the master pneumatic control panel.

How they *blow on the lights* at Bowling Green State University . . .

Fulfilling a request for centralized control of heating and ventilating for a multi-purpose building is both a logical and standard procedure. But at Bowling Green's Memorial Hall, the plans also called for selective control of the building's 248 assembly hall lights from the same location. Architect-engineer, James E. Allen, not only took the situation in hand—he put all operations through a single master panel.

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The pneumatic control panel is located in a corridor adjacent to the arena area. The left hand section controls heating and ventilating. Switches regulate fans and dampers for summer and winter conditions and also provide for quick warm-up when required. The right hand section gives visible selective control of various lighting arrangements by means of a color coded layout chart. Lighting in any part of the arena assembly hall area can be regulated as desired and instantly verified.

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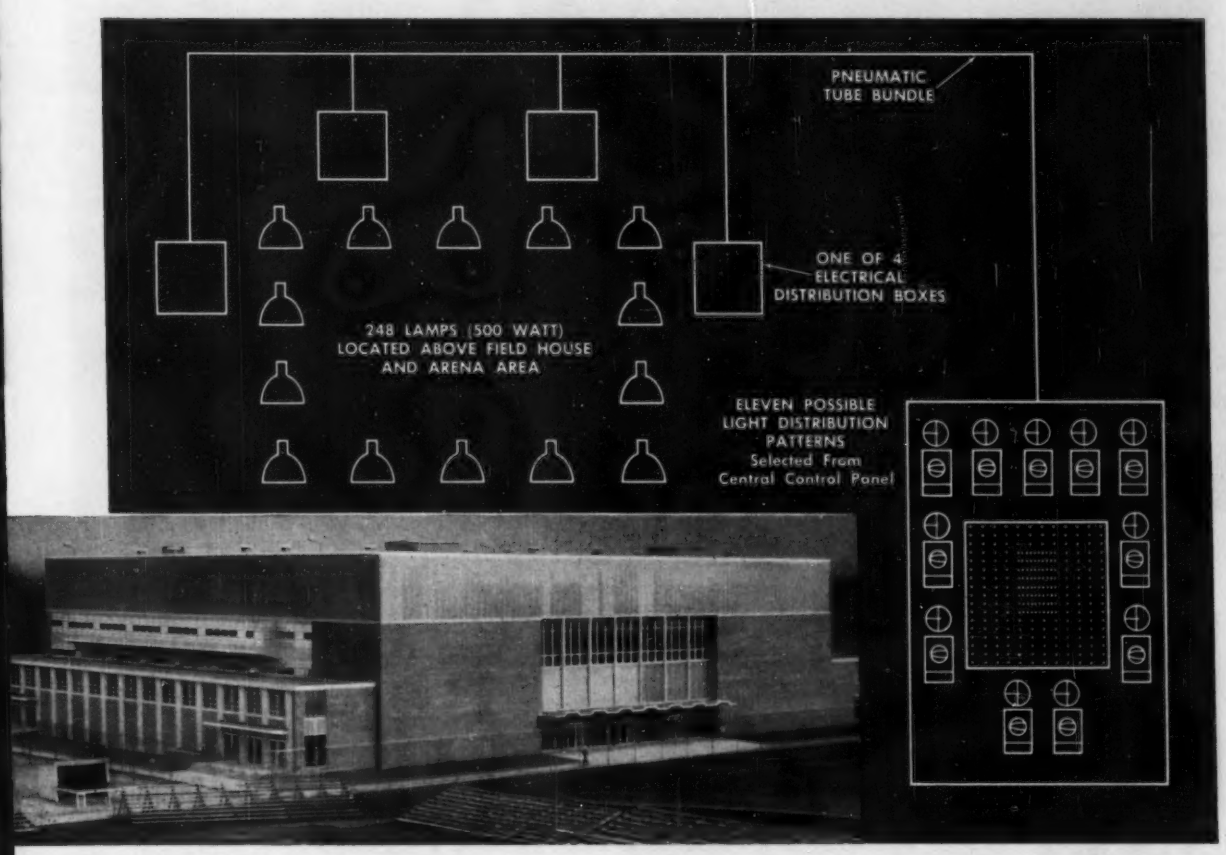

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Will you help me decide?

Sincerely yours,
Uncertain

Dear Uncertain:

Yes, I'll be happy to *help* you decide. But, finally, *you* must decide if you are to become a *candidate* . . . and the voters of your district must decide if you are to become a *board* member.

School board members aren't always the most *comfortable* people. I recall a cartoon I saw recently that pictured two little boys leaving a movie theater and one little fellow was saying — "I like TV best . . . it's closer to the bathroom." I'm afraid that we adults, figuratively speaking, sometimes want to stay too close to the "bathroom" . . . we want to be *too* comfortable. But better education and better schools aren't achieved by being *too* comfortable. Good education isn't a spectator sport . . . we all need to be in there carrying the ball and playing the game. And whoever carries the ball is going to be tackled once in a while . . . and, perhaps, even thrown for a loss.

Your decision to become a candidate will depend upon your answer to these questions: Do you believe sincerely in our system of public education? Do you feel that your children and your neighbor's children are the most important product of your community? Do you feel that you have a responsibility for and can make a contribution to their intellectual, moral and spiritual development? Are you willing to spend time, thought and effort to implement this responsibility? Are you willing to risk even a bit of your *personal* business? Or . . . would you rather stay close to the "bathroom"?

Yours with certainty,
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* "Maintenance of Vinyl Asbestos Tile and Asphalt Tile Floors," published by the Institute, N. Y. 17, N. Y.

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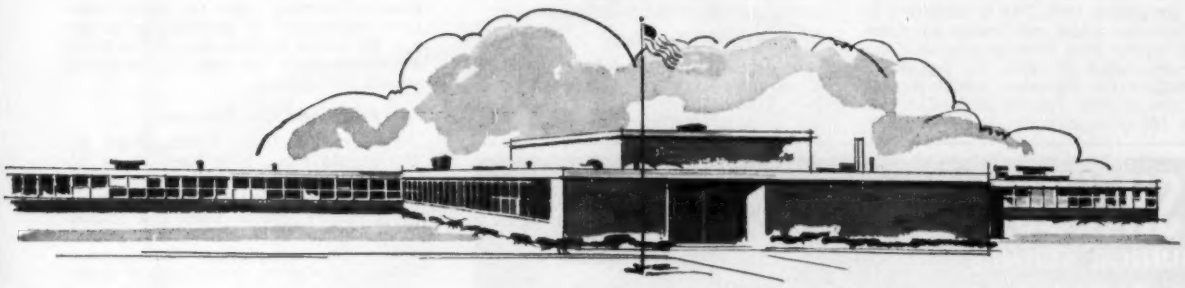

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In schools, the wall is always the best place for the thermostat. On the wall, it feels the temperature the way students do. It is also more convenient to read and adjust. Fuel bills are lower because wasteful overheating is eliminated.

You can depend on Honeywell to recommend the best temperature control system for your school because only Honeywell designs and manufactures all three types of control systems—electric, pneumatic and electronic. For further details, call your nearest Honeywell office. Or, write Honeywell, Dept. AJ-5-122, Minneapolis 8, Minnesota. In Canada, write Honeywell Controls Limited, Toronto 17, Ontario. *Sales and service offices in all principal cities of the world.*

Mounted in every classroom, the Honeywell Round Thermostat enables teachers to adjust room temperatures to fit specific learning activities.

Honeywell

First in Control

SINCE 1885

new books

School Expense Compared With Total City Expense, 1959

Paper, 10 pp., 50 cents. American Association of School Administrators, Washington 6, D. C.

The report contains a summary of school expenses for schools in cities over 25,000 in population. It is shown that the percentage figure for all cities rose only 1.2 per cent, from 30.1 per cent in 1955 to 31.3 per cent in 1959. This is attributed to the fact that school enrollments are rising more rapidly than total population. Over a longer period of years, the per capita expenditure for dependent school systems in cities of over 100,000 population rose from $26.42 in 1949 to $53.87 in 1959. Differences in costs among cities arose partly from variations in administrative organization and in emphasis on different phases of education.

Bond Sales for School Purposes, July, 1959, to June, 1960

By Elmer C. Deering. Paper, 11 pp. School Finance Section, U. S. Office of Education, Washington 25, D. C.

This circular presents a state-by-state summary of new bonds sales for public school purposes for the 1959–60 school year. The report shows that the total of bonds sold amounted to $2,195,242,000.

School Public Relations

By James J. Jones and Irving W. Stout. Cloth, 191 pp., $3.75. G. P. Putnam's Sons, New York, N. Y.

This book identifies and treats some of the common issues in American public education, including school board effectiveness, financing and budget preparation, planning of school plants, personnel administration, the educational program, new methods of instruction, and school public relations.

Sound Language Teaching

By J. S. Holton, P. E. King, G. Mathieu, and K. S. Pond. Cloth, 249 pp., $5.50. University Publishers, Inc., New York 22, N. Y.

This book discusses methods of teaching modern languages with the aid of electronic equipment. It provides an insight into the newest methods and devices which will increasingly be used in secondary schools and colleges.

Television and Our Schools

By Donald G. Tarbet. Cloth, 268 pp., $5. The Ronald Press, New York 10, N. Y.

This work outlines the present-day methods of teaching by television in elementary and secondary schools. There is a chapter on the future of television. The author recommends very properly the expansion of local experiments, the training of studio teachers, and the improvement of school buildings for television instructional methods.

Teach With Television

By Lawrence Costello and George N. Gordon. Cloth, 192 pp., $5.50. Hastings House Publishers, Inc., New York 22, N. Y.

This book outlines the best present knowledge of the possibilities and methods of *instructional* television — the kind which the teacher can and should use in the classroom at the elementary and secondary levels. Instructional television fits into any good program of education; it needs no scary philosophizing critical of school curricula.

Boardman: A Guide for the School Board Member

Edited by H. Thomas James. Paper, 102 pp., $3. Stanford University Press, Stanford, Calif.

This helpful guide is designed to direct the attention of board members to two different dimensions in the institutional arrangements of the public school. It takes up (1) the structural — the shaping of an instrument for carrying out a broad public policy; (2) the functional — the interpretation of the community's social policy. Functions of the board and policy making, board meetings and organization, the board's responsibilities, staff relations, and the powers and responsibilities of the board as defined by state law are some of the points covered.

The Relationship of Initial Cost and Maintenance Cost in Elementary Schools

By William J. Zimmerman. Paper, 13 pp. School of Education, Stanford University, Stanford, Calif.

These summary findings of a study of the relationship of initial and maintenance costs in elementary schools are based on 30 elementary buildings in Los Angeles. Five factors were found to be related to initial cost: (1) type of walls; (2) number of bidders; (3) year of the bid; (4) topography of site; and (5) total area in square feet of permanent construction. Where maintenance cost was considered, two factors were important: (1) proportion of school building in classrooms; (2) proportion of the plant arranged for large group activity.

(For more information from advertisers, use postcard on page 57)

(For more information from advertisers, use postcard on page 57)

NEW PRODUCTS

NEW SCHOOL FURNITURE

Two new teachers desks to harmonize with a line of student furniture have been introduced to the school market by Irwin

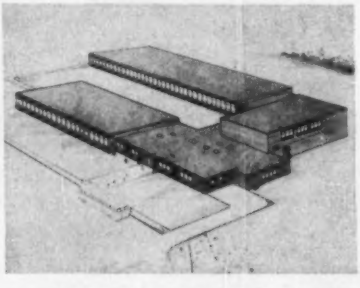
Single Pedestal Desk

Seating Co., Grand Rapids, Mich. Model 60-1-3 is 30 by 60 in. with a double pedestal. Model 48 is 30 by 40 in. with a single pedestal. The functional desks have long wearing, stainproof tops with full suspension drawers. The company also offers its new Alumi-Guard chair of vinyl bonded to steel in six new colors and six sizes from 12 to 17½ in., to fit all grades. Send for more information and color samples.

(For Further Details Circle Index Code 074)

PREFAB SCHOOL

This 16 classroom school of modular steel is now being erected in Streetsboro, Ohio, by the American Bridge division of U. S. Steel Corp. The exterior combines blue



Steel Curtain Walls

porcelain enameled steel with masonry. Interior partitions are vinyl-coated steel in pastel colors. Doors are polyurethane-filled steel doors prehung in frames at the fabricating plant. In addition to the 16 classrooms, the building includes a cafetorium with stage, teachers' lounge, clinic, book room, offices and storage area. The architects, Hunter & Howard of Warren, Ohio, estimate the sq. ft. cost at $13.29 compared to $15 for comparable school construction in the area.

(For Further Details Circle Index Code 075)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

PARTITION CONTROLS NOISE

"A folding partition with the sound insulating characteristics of a solid masonry wall," is the way New Castle Products, Inc., New Castle, Ind., describes its new Modernfold Soundmaster 240. With this folding partition, normal speech on one side of the curtain is inaudible on the other; loud speech or noise is muffled. The steel-lined panel has 12 separate layers of material. When not in use, a typical 20 by 15 ft. partition may be stacked in 32¾ in. space. It is reasonably priced.

(For Further Details Circle Index Code 076)

ALUMINUM SCHEDULE BOARD

An expandable aluminum schedule board for programming school teacher, pupil, and curriculum schedules is offered by Gametime, Inc., Litchfield, Mich. The board

Holds Program Cards

holds printed and color-coded cards that instantly give a graphic summary of the school's entire schedule. Modular in design and flexible, In-Sight-Trol (for instant sight control) boards will accommodate from 15 to 90 teacher schedules. Easy to install, the boards fit into wall brackets by means of a positive locking hook device.

(For Further Details Circle Index Code 077)

TEACHING LAB INNOVATIONS

A new console and student booth arrangement of the Webster Tape Teaching Laboratory has been introduced recently by the Webster Electric Co., Racine, Wis. The control console houses four tape

Instructor's Console

recorders, student control and monitor panels, as well as drawer space for a phono turntable and radio broadcast facilities. The control unit offers the advantage of slanted tape decks so that the instructor can view the class without standing.

(For Further Details Circle Index Code 078)

CHAIR FOR SCIENCE ROOMS

The Adjusto Equipment Co., Bowling Green, Ohio, offers a new Fiberglas chair for biology and science rooms. It features

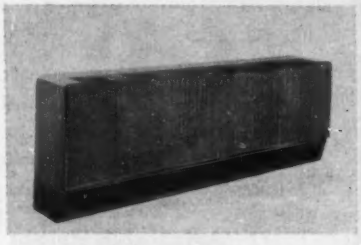
Adjustable Heights

an adjustable mechanism that permits the user to obtain any desired height from 18 through 26 inches by simply lifting the seat. The one-piece molded seat and back come in five standard colors. The cast iron base, with 20 inch spread, has 1⅛ in. steel glides; also available with tubular steel base.

(For Further Details Circle Index Code 079)

NEW HEATING CONCEPT

School-Vent developed by Modine Mfg. Co., Racine, Wis., employs a new concept in school heating, cooling and ventilating. Unlike existing units which modulate control valves to regulate steam or hot water, the School Vent utilizes a full-damper sys-



Full-Damper-System

tem to control the air, not the water, temperature. Both indoor and outdoor dampers assure a proper blend of fresh and recirculated air at all times, adjusting automatically to maintain pinpoint comfort levels. It heats with steam or hot water and cools with central-source chilled water. The unit can be mounted on wall or ceiling, partially or fully recessed or fully exposed. The system is particularly recommended for low-budget classrooms. Five sizes of heating and cooling units are available; if necessary, cooling can be added later. Send for complete details.

(For Further Details Circle Index Code 080)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

(For more information from advertisers, use postcard on page 57)

JUNIOR FOLDING CHAIRS

A completely new line of junior and juvenile size folding chairs with a safety Y-type design, is presented by Krueger Metal Products Corp., Green Bay, Wis.

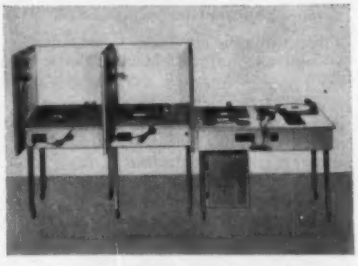
Recessed Saddle Seat

The well-balanced chair permits a child to sit well forward on the front of the seat, lean far back, or go through typical childlike gymnastics without tipping or collapsing. Both models — the junior (28¾ in. high) and juvenile (22¼ in. high) — are furnished with a saddle recessed steel seat or vinyl upholstered seat in several colors. Steel tube frames and safety action hinges are other features.

(For Further Details Circle Index Code 081)

EXPANDABLE "LEARNING CENTER"

The new V-M plan answers the budget problem of a high quality language laboratory installation for the small to medium sized school. Expandable in every way,



Removable Recorders

the system may start with a single tape recorder, but later be enlarged to meet any number of student positions. The complete tape recorder is removable from the booth so that student or teacher may take it home or to a practice classroom. Teachers can conveniently check student response material and record master lesson tapes at home or in their offices. Complete and detailed construction drawings of the student booth and the instructor's master console are available by writing V-M Corp., Benton Harbor, Mich.

(For Further Details Circle Index Code 082)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

(For more information from advertisers, use postcard on page 57)

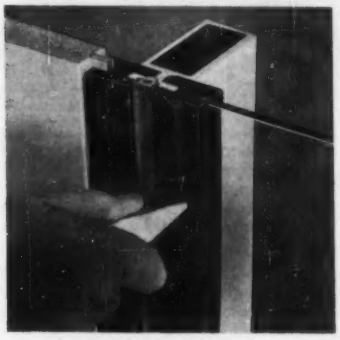
COMPACT COMMUNICATIONS SYSTEMS

School communications equipment that can be expanded to serve as many as 48 rooms, has been introduced by the Du-Kane Corp., St. Charles, Ill. The Compact line consists of four models in two styles of metalware (table top and console). Each system provides executive two-way communication; audio educational facilities for all classes utilizing an AM-FM radio tuner or a four-speed record player; and all-call service in time of emergency. Write for complete details.

(For Further Details Circle Index Code 083)

WEATHERPROOF CURTAIN WALLS

Zipperwall is a new curtain wall system that employs structural neoprene weatherstrip as a connector for its structural components. Made by Kawneer Co., Niles, Mich., the prefabricated system includes aluminum mullions, panels, windows, and perimeters. An H-shaped neoprene gasket is manually "zipped" into place where it



"Zipper" Gasket

hermetically seals in the components. Recommended for the low budget school, the system offers advantages of quick assembly and complete weatherproofing. Send for details.

(For Further Details Circle Index Code 084)

REPLACE STAIR TREADS

New Stairmaster aluminum safety treads by Wooster Products, Inc., Wooster, Ohio, offers an easy method of renewing worn,

Anti-Slip Surface

slippery stairs. The base of the tread is heavy-duty aluminum with ribs of abrasive that provide an anti-slip walking surface. The 9 in. wide tread comes in lengths up to 12 ft. Installation can be easily made by the school maintenance staff. Send for bulletin.

(For Further Details Circle Index Code 085)

RESTYLED BATH CONTROLS

The Powers Hydroguard Thermostatic Shower-Tub Control has been restyled by the Powers Regulator Co., Skokie, Ill. It features a satin chrome case with an easy-grip handle. The unit has a sealed thermal element that prevents delivery of water above 110° F. It automatically prevents sudden bursts of hot or cold water. Send for details.

(For Further Details Circle Index Code 086)

SCIENCE LABORATORY UNIT

The National School Furniture Co., Odenton, Md., has added a new mobile Science Laboratory unit to its line of classroom cabinets. The unit is completely surfaced on the interior and exterior with high-pressure laminates that will not crack, craze or peel in normal use. It features two drop leaves that extend the top to six fit. in length. When closed, the top measures 24 by 50 in. It is furnished with a stainless steel sink, pump and faucet; two plastic bottles for fresh water and drainage; two tote trays; Greenlaw arm; propane bunsen burner; and grounded electrical outlets. Send for a catalog.

(For Further Details Circle Index Code 087)

CATALOGS AND BOOKLETS

Neumade Products Corp., New York 19, N. Y., offers new literature covering an expanded line of cabinets for storing language laboratory tapes as well as records of all sizes. Send for details.

(For Further Details Circle Index Code 088)

A new 8 page catalog by **Stonco Electric Products Co.**, Kenilworth, N. J., details the complete line of cast aluminum outdoor floorlights and fixtures. Ask for catalog S-61.

(For Further Details Circle Index Code 089)

"Blueprint for Better Schools" emphasizes how wood may be used to produce aesthetic, economical, and efficient schools. The large booklet available from Wood Information Center of **National Lumber Mfgrs. Assn.**, Washington 6, D. C., features designs by Cooper and Auerbach, architects. Three basic junior high schools are presented to illustrate compact, hillside, and pavilion structures.

(For Further Details Circle Index Code 090)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

MANUFACTURER'S NEWS

George S. Watts, vice-president of the **Edwin F. Guth Co.**, St. Louis, Mo., lighting equipment manufacturers, retired March 1, after more than 50 years of service and 45 years as vice-president.

Earle F. Opie, president of **Weber Costello Co.**, Chicago Heights, Ill., has announced the appointment of John B. Bowman as executive vice-president and general manager.

Albert R. Said has been named president of the **School Equipment Division of Brunswick Corp.**, according to B. E. Bensinger, Brunswick president. He replaces Joseph W. Scalise, recently appointed vice-president in charge of manufacturing for Brunswick's International division.

READER'S SERVICE SECTION

INDEX TO SCHOOL EQUIPMENT

The index and digest of advertisements below will help you obtain free information, catalogs, and product literature from the advertisements and companies listed in the new products section. Merely encircle the code number assigned to each firm in the request form below, clip the form and mail it to THE AMERICAN SCHOOL BOARD JOURNAL. Your request will receive prompt attention.

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These cards are provided for the convenience of THE AMERICAN SCHOOL BOARD JOURNAL readers in requesting information on products, services, booklets, and catalogs offered by the advertisers in this issue.

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May, 1961

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City _____ Zone ____ State _____

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READER'S SERVICE SECTION

(Continued)

NEW PRODUCTS

CATALOGS AND BOOKLETS

MILDRED BALLARD, BLOOMFIELD, OHIO HIGH SCHOOL TYPING INSTRUCTOR,

prefers Royal Electric Typewriters;
says students find "change-over" easy.

"I prefer Royal typewriters in general," says Mildred M. Ballard, "because of their ease of operation, their simplicity and their time-saving conveniences.

"I prefer Royal Electrics in particular because my students experience little difficulty in changing from the manual to the electric."

Miss Ballard speaks from 18 years of experience in the classroom. You, too, will find the beautiful new Royal Electric a fine teaching aid . . . a natural complement to your Royal Manual typewriters . . . easy to learn, easy to teach. Royal service is dependable, too.

Your Royal Representative will be happy to demonstrate the modern new Royal Electric right in your own classroom or office. Why don't you discuss your needs for the coming school year with him soon.

ROYAL® ELECTRIC

PRODUCT OF ROYAL McBEE CORPORATION, WORLD'S LARGEST MANUFACTURER OF TYPEWRITERS.

(For more information from advertisers, use postcard on page 57)

Prefabricated in modular units . . .

installed quickly and easily

Light and cheerful inside, yet no glare . . . thanks to Thinlite

Thinlite curtain wall improves learning environment ...increases visual and thermal comfort at low cost

Glare-free, diffused daylight contributes to better environment for learning. Solar-selecting panels of Thinlite curtain walls are scientifically designed to distribute harsh sunlight softly and evenly throughout classrooms . . . for superior seeing and reading comfort. Expensive shading devices are not required.

Solar-selecting Thinlite panels minimize solar heat . . . actually are double glazed . . . to help control interior temperatures all year long . . . for low-cost physical comfort.

Important in curtain wall construction is the weather-tight permanence which Thinlite assures, due to its double gasketing system.

And, Thinlite requires little maintenance in providing a permanent, beautiful exterior surface, inside your classrooms as well as on the exterior of your school building.

Ask your architect about the infinite variety of design possibilities with Thinlite. Or, write to Kimble Glass, subsidiary of Owens-Illinois, Toledo 1, Ohio for complete information.

THINLITE CURTAIN WALL
AN (O) PRODUCT

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GENERAL OFFICES · TOLEDO 1, OHIO